AIR TRAFFIC AND NAVIGATION SERVICES SOC. LTD REPUBLIC OF SOUTH AFRICA

REQUEST FOR PROPOSALS: ATNS/PTQ/RFP24/2024/25/WGS-84

APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY, DELIVER, SUPPORT, AND MAINTAIN WGS-84 SURVEY EQUIPMENT FOR 5 YEARS TO ATNS.

VOLUME 2, 3 & 4

TECHNICAL, PROJECT MANAGEMENT & LOGISTICS

FEBRUARY 2025

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GENERAL INSTRUCTIONS TO TENDERERS

The Tenderer shall submit all responses, diagrams, project management documentation and drawings according to the GENERAL INFORMATION AND INSTRUCTIONS TO TENDERERS document and in the English language.

To assist Tenderers only, each paragraph or article has been appended throughout with the letters “(M)”, “(D)”, “(O)” or “(I)”, to indicate whether the requirement is **M**andatory, **D**esirable, **O**ptional or for **I**nformation only.

ALL RESPONSES TO THE REQUIREMENTS IN THIS DOCUMENT SHALL BE PROVIDED AS FOLLOWS:

TENDERERS SHALL RESPOND IN FULL TO EACH ITEM IN THE FORMAT PROVIDED AND REFERENCES (CHAPTER, SECTION, PAGE NUMBER, PARAGRAPH NUMBER) TO DOCUMENTS AND RELEVANT INFORMATION SUPPORTING THE RESPONSES SHALL BE INDICATED IN THE SPACE PROVIDED. THIS INFORMATION WILL BE THE **ONLY RESPONSE USED FOR THE EVALUATION AND ASSESSMENT.**

Responses, provided in the space allowed, that are not clear or inadequate or the lack thereof shall be interpreted as **“Not Compliant”** even though the compliance column is declared as “Comply” and/or the Tenderer’s offer meets the requirement. Tenderers shall ensure that each response correctly addresses the requirement stated. Responses not addressing the requirement of the specific paragraph shall be interpreted as **“Not Compliant”.**
Tenderers shall declare compliance to each and every paragraph of this document in the column labelled “Compliance” as follows:

C:	fully compliant	=	2 points;
PC:	partly compliant	=	1 point;
NC:	not compliant	=	0 points.

Noted: Noted and accepted (applicable to paragraphs marked as “I”, not containing requirements)

Tenderers shall, for paragraphs declared “PC” or “NC”, include a statement as to the nature of the variation and may additionally supply supporting information in the space provided to demonstrate how the proposal meets the needs of ATNS.

Paragraphs marked “(M)”, indicates that the requirement is mandatory and proposals not compliant with the requirement shall be disqualified for further evaluation.

Paragraphs marked “(D)”, indicates that the requirement is desirable, and the tenderer is expected to declare their level of compliance, formal response and reference supporting documents.

Paragraphs marked “(I)”, indicates that the requirement is for information, however the tenderer is still expected to respond and provide information if requested. Any information gathered herein may form part of the contractual terms.
Paragraphs marked “(O)”, indicates that the requirement is optional, and the tenderer may decide how to respond.

Chapter 1: Volume 2

Technical Requirements

1. Introduction

The Air Traffic and Navigation Services Company (ATNS) is seeking qualified suppliers to participate in a tender process for the supply, delivery, and support of advanced WGS-84 survey equipment and accessories. The primary objective of this tender is to enhance the precision and efficiency of our surveying operations by integrating state-of-the-art technology and tools into our existing systems. This initiative is part of ATNS's commitment to maintaining the highest standards of accuracy and reliability in air traffic management and navigation services.

2. Purpose

The purpose of this tender is to invite reputable and experienced suppliers to submit proposals for the provision of WGS-84 survey equipment, including the GNSS Receiver, Surveying, Imaging and 3D Scanning Station Set, and associated accessories. The selected supplier(s) will be responsible for ensuring that the equipment meets the specified technical requirements, delivering the equipment to the ATNS Bruma Fead Office, providing comprehensive training for ATNS technical staff, and offering ongoing after-sales support and maintenance.

3. Project Overview

The project involves the procurement of advanced WGS-84 survey equipment to support ATNS's surveying and mapping operations. The equipment will by the WGS-84 team to enhance the accuracy and efficiency of our geospatial data collection and analysis. The scope of the project includes the supply, delivery, installation, configuration, training, and maintenance of the specified survey equipment and accessories.

4. Scope of Work

The scope of works includes:

1. Supply and Delivery

1.1. Supply all equipment of the following:
1.1.1. Ensure delivery to **Air Traffic & Navigation Services (ATNS) SOC Ltd, Block C, Eastgate Office Park, South Boulevard Road, Bruma, 2198**.

2. Verify and check all equipment upon delivery for compliance with specifications.

3. Calibration Services

3.1. Provide initial calibration for all supplied equipment.
3.2. Ensure all equipment remains calibrated and in proper working order for a period of five years.
3.3. Perform annual calibration checks and adjustments as necessary.
3.4. Provide documentation of each calibration service performed.

4. Training and Support

4.1. Provide training for ATNS SOC LTD personnel on the use and maintenance of all supplied equipment.
4.2. Offer technical support as needed for the duration of the five-year calibration period.

5. Contract Deliverables

The following bill of materials describes equipment and services to be acquired as a result of this tender

WGS-84 Equipment		
Item No.	**Description**	**Qty**
Global Navigation Satellite System Set		
1	Advanced GNSS receiver	1
2	Base and rover configuration level	1
3	Dual battery charger with power supply	1
4	Rugged handheld controller with WWAN connectivity	1
5	Handheld controller mounting bracket	1
6	Adjustable arm and quick release clamp for mounting bracket	1
7	Rod - 2.0m Carbon Fibre Range Pole without Bipod	1
8	Protective carrying bag for a GNSS pole	1
9	32GB USB Type C Flash Drive	4
10	Precision tribrach with optical plummet	3
11	Rugged transport case (GNSS Receiver)	1
12	Configuration: LT base and rover modes.	1
13	GNSS Receiver: Accessory kit, including pouch, battery, charger, and base station extender.	1
14	Mounting bracket for attaching radio to a tripod	1
15	Radio antenna cable for GNSS Receiver, minimum 5 meters in length	1
16	Unity gain antenna whip for radio, 450-470MHz frequency range.	1
17	Heavy-duty tripod: GNSS Receiver	1
18	Precision tribrach with optical plummet	1
19	Adapter for converting tribrach to 5/8" thread with removable center for various mounting options	1
20	Protective carrying bag for heavy-duty wooden tripod	1
Surveying, Imaging and 3D Scanning Station Set		

1	High-precision total station with integrated surveying, imaging, and 3D scanning capabilities	1
2	Configuration options for 1, including standard settings and laser pointer functionality	1
3	Dual battery charger with power supply	1
4	Power kit for robotic operation	1
5	High-quality tape measure marked in metric units and tenths	1
6	A heavy-duty tripod to support 1	1
7	Protective carrying bag for heavy-duty wooden tripod	1
8	2.6-meter aluminium telescopic rod	1
9	Protective carrying bag (Prism Pole)	1
10	A 360-degree prism with height adapter for use with standard rods	1
11	Protective carrying bag (Traverse Prism)	1
12	Advanced field handheld controller with QWERTY keypad and multiple connectivity options	1
13	2.4GHz communication module	1
14	Durable shoulder to carry 12	1
15	Mounting bracket for attaching 12 to a survey pole	1
16	Adjustable arm and quick release clamp for mounting 12	1
17	External battery charger with internal cord for 12	1
2.4 Ghz 3" Total Station Set		
1	Total station with 3" angular accuracy	1
2	Anti-glare screen protectors	1
3	A heavy-duty tripod	1
4	Protective carrying bag (Wooden Tripod)	1
5	2.6-meter aluminium telescopic rod	2
6	Protective carrying bag (Prism Pole)	2
7	Traverse prism with anti-reflective (AR) coating	2
8	Protective carrying bag (Prism)	2
9	Medium-duty aluminium tripod	2
Matrix Drone		
1	Advanced drone with RTK capabilities for high-precision aerial surveys	1
2	Advanced battery management system	1
3	High-capacity battery designed	8
4	Ground control point (GCP) kit	1
5	High-resolution camera designed for photogrammetry and surveying, offering superior image quality and efficiency.	1
Additional Modules		
1	Photogrammetric processing	2
2	Scanning module	2
Additional Accessories		
1	Lithium-ion battery pack designed for industrial use	4
2	Stabilizing bipod	2
3	High-accuracy laser range finder	2
4	Telescopic prism pole with twist-lock mechanism,	2
5	High-resolution digital camera with wireless capabilities	1

6. Contract Specific Deliverables

All equipment to be supplied under this tender shall comply with the specifications outlined herein.

7. GNSS Set

7.1. Advanced GNSS receiver Description: Advanced GNSS receiver with precise positioning capabilities.

7.1.1. The GNSS receiver shall meet the following requirements:

7.1.1.1. Key Features

7.1.1.1.1. Calibration-free, IMU-based tilt compensation.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.2. GNSS positioning engine for improved accuracy in challenging conditions.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.3. 672-channel solution 360 satellite tracking technology.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.4. RTX correction service for fast, RTK level accuracy via satellite/IP.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.5. Correction outage technology.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.6. Optimized for field software.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.7. Support for Android™ and iOS platforms.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.8. Military-spec rugged design with IP67 rating.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.9. Ergonomic form factor with all-day battery life and built-in status indicator.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.10. 6 GB internal memory.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.1.111. Supports augmented reality capabilities.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.2. Performance Specifications:

7.1.1.2.1. **GNSS Measurements**:

7.1.1.2.1.1. **Constellations Supported**: GPS, GLONASS, Galileo, BeiDou, QZSS, SBAS (WAAS, EGNOS, GAGAN, MSAS), NavIC (IRNSS), L-band (GNSS Correction).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.2.1.2. **Signals Tracked**: GPS: L1C, L1C/A, L2C, L2E, L5; GLONASS: L1C/A, L1P, L2C/A, L2P, L3; SBAS: L1C/A, L5; Galileo: E1, E5A, E5B, E5 AltBOC, E6; BeiDou: B1, B1C, B2, B2A, B2B, B3; QZSS: L1C/A, L1S, L1C, L2C, L5, L6.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.2.1.3. **Positioning Rates**: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3. Positioning Performance:

7.1.1.3.1. Static GNSS Surveying:

7.1.1.3.1.1. High-Precision Static: Horizontal 3 mm + 0.1 ppm RMS; Vertical 3.5 mm + 0.4 ppm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.1.2. Static and Fast Static: Horizontal 3 mm + 0.5 ppm RMS; Vertical 5 mm + 0.5 ppm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.2. Real-Time Kinematic (RTK) Surveying:

7.1.1.3.2.1. Single Baseline <30 km: Horizontal 8 mm + 1 ppm RMS; Vertical 15 mm + 1 ppm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.2.2. Network RTK: Horizontal 8 mm + 0.5 ppm RMS; Vertical 15 mm + 0.5 ppm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.2.3. RTK Start-Up Time: 2 to 8 seconds.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.3. Inertial Technology:

7.1.1.3.3.1. Compensated Surveying: Horizontal RTK + 5 mm + 0.4 mm/° tilt (up to 30°) RMS; Horizontal RTX + 5 mm + 0.4 mm/° tilt (up to 30°) RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.4. RTX Correction Services:

7.1.1.3.4.1. CenterPoint RTX: Horizontal 2 cm RMS; Vertical 5 cm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.4.2. RTX Convergence Time: <1 min (RTX Fast regions), <15 min (non-RTX Fast regions), <1 min (RTX QuickStart).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.1.1.3.5. Correction Outage Technology:

7.1.1.3.5.1. Horizontal RTK + 10 mm/minute RMS; Vertical RTK + 20 mm/minute RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.6. Correction Outage Technology Horizontal and Vertical:

7.1.1.3.6.1. Horizontal 3 cm RMS; Vertical 7 cm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.7. Code Differential GNSS Positioning:

7.1.1.3.7.1.1. Horizontal 0.25 m + 1 ppm RMS; Vertical 0.50 m + 1 ppm RMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.3.7.2. SBAS typically <5 m 3DRMS.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4. Hardware Specifications

7.1.1.4.1. Dimensions: 11.9 cm (W) x 13.6 cm (H).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2. Weight: 1.12 kg with internal battery, internal radio with UHF antenna.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.3. Temperature: Operating: -40°C to +65°C.Storage: -40°C to +75°C.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.4. Humidity: 100%, condensing.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.5. Ingress Protection: IP67 dustproof, protected from temporary immersion to depth of 1 m.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.6. Shock and Vibration: MIL-STD-810F standards; non-operating shock: 2 m pole drop onto concrete; operating shock: 40 G, 10 msec, sawtooth.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.1. Power

7.1.1.4.1.1. 11 to 24 V DC external power input with over-voltage protection on Port 1 and Port 2 (7-pin Lemo).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.1.1.4.1.2. Rechargeable, removable 7.4 V, 3.7 Ah Lithium-ion smart battery with LED status indicators.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.1.3. Power consumption: 4.2 W in RTK rover mode with internal radio.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.1.4. Operating times on internal battery: 450 MHz receive only: 6.5 hours; 450 MHz receive/transmit (0.5 W): 6.0 hours; 450 MHz receive/transmit (2.0 W): 5.5 hours; Cellular receive: 6.5 hours.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2. Communications and Data Storage

7.1.1.4.2.1. Serial: 3-wire serial (7-pin Lemo).

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.1.1.4.2.2. USB: v2.0, supports data download and high-speed communications.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2.3. Radio Modem: Integrated 450 MHz wide band receiver/transmitter, frequency range 403-473 MHz, supports Trimble, Pacific Crest, and SATEL radio protocols, transmit power 2 W, range 3-5 km typical / 10 km optimal.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2.4. Cellular: Integrated 3.5 G modem, HSDPA 7.2 Mbps (download), GPRS multi-slot class 12, EDGE multi-slot class 12, Penta-band UMTS/HSDPA (WCDMA/FDD) 800/850/900/1900/2100 MHz, Quad-band EGSM 850/900/1800/1900 MHz, GSM CSD, 3GPP LTE.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2.5. Bluetooth: Version 4.1.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2.6. Wi-Fi: 802.11 b/g, access point and client mode, WPA/WPA2/WEP64/WEP128 encryption.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2.7. I/O Ports: Serial, USB, TCP/IP, IBSS/NTRIP, Bluetooth.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.4.2.8. Data Storage: 6 GB internal memory.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.1.1.4.2.9. Data Formats: CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output; 24 NMEA outputs, GSOF, RT17, and RT27 outputs, 1 PPS output.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.5. **Web UI**: Offers simple configuration, operation, status, and data transfer, accessible via Wi-Fi, Serial, USB, and Bluetooth.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.6. **Supported Controllers & Field Software**: Handheld, Android and iOS devices running supported apps.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.7. Augmented Reality: Supports outdoor augmented reality capabilities through applications running on the handheld controller.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.1.1.8. Certifications: FCC Part 15 (Class B device), 24, 32; CE Mark; RCM; PTCRB; BT SIG.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.2. Base and rover configuration level

Description: Configuration to operate in both base and rover modes.

7.2.1. The base and rover configuration level shall meet the following requirements:

7.2.1.1. Modes: Base mode for establishing a GNSS base station, rover mode for field data collection.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.2.1.2. Compatibility: GNSS receiver.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.2.1.3. Configuration: Pre-set configurations for easy switching between base and rover modes.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.2.1.4. Calibration: Pre-calibrated for accuracy and performance.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.3. Dual battery charger with power supply

Description: Dual battery charger with power supply, designed for South African power standards.

7.3.1. The battery charger shall meet the following requirements:

7.3.1.1. Charging Bays: 2

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.3.1.2. Input Voltage: 100-240 V AC

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.3.1.3. Output Voltage: 12 V DC

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.3.1.4. Charging Time: Approximately 4 hours for full charge

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.3.1.5. Compatibility: Compatible with GNSS Receiver batteries

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.3.1.6. Indicators: LED status indicators for charging progress

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.3.1.7. Plug Type: European standard plug

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4. Handheld controller with Wireless Wide Area Network (WWAN), Worldwide Region

Description: Rugged handheld controller with WWAN connectivity for field data collection.

7.4.1. The handheld controller shall meet the following requirements:

7.4.1.1. Display: 5-inch sunlight-readable touchscreen

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4.1.2. Processor: 2.2 GHz quad-core processor

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4.1.3. Memory: 4 GB RAM, 64 GB internal storage

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4.1.4. Operating System: Android 10

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4.1.5. Connectivity: WWAN, Wi-Fi, Bluetooth, GNSS, USB-C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4.1.6. Battery Life: Up to 10 hours

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.4.1.7. Durability: IP67-rated for dust and water resistance

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.5. Pole Mount Bracket for the Handheld Controller

Description: Mounting bracket for attaching the Handheld controller to a survey pole.

7.5.1. The mounting bracket shall meet the following requirements:

7.5.1.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.5.1.2. Adjustability: 360-degree rotation.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.5.1.3. Compatibility: Fits standard survey poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.5.1.4. Weight: Approximately 0.5 kg.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.5.1.5. Features: Durable construction, easy to attach and detach, secure grip

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.6. Handheld Controller Adjustable Arm and Quick Release Pole Mount Clamp

Description: Adjustable arm and quick release clamp for mounting Handheld controllers.

7.6.1. The pole clamp shall meet the following requirements:

7.6.1.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.6.1.2. Adjustability: Fully adjustable arm for optimal positioning.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.6.1.3. Quick Release: Easy to attach and detach the controller.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.6.1.4. Compatibility: Fits standard survey poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.6.1.5. Features: Secure grip, durable construction, lightweight design.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.7. Rod - 2.0m Carbon Fibre Range Pole without Bipod

Description: Lightweight and durable carbon fibre range pole for precise measurements.

7.7.1. The rod shall meet the following requirements:

7.7.1.1. Material: Carbon fibre

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.7.1.2. Height: 2.0 meters

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.7.1.3. Weight: Approximately 0.7 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.7.1.4. Compatibility: Fits standard GNSS receivers and accessories

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.7.1.5. Features: Durable, lightweight, easy to transport.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.8. Stage Bag for GNSS Pole (Carbon Pole)

Description: Protective carrying bag for a GNSS pole made of carbon fibre.

7.8.1. The bag shall meet the following requirements:

7.8.1.1. Material: Durable, weather-resistant fabric.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.8.1.2. Dimensions: Custom-fit for carbon fibre GNSS poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.8.1.3. Closure: Heavy-duty zipper.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.8.1.4. Handles: Reinforced handles for easy carrying.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.8.1.5. Features: Padded interior, external pockets, durable. ..construction.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.9. 32GB USB Type C Flash Drive

Description: High-speed flash drive for data storage and transfer.

7.9.1. The flash drive shall meet the following requirements:

7.9.1.1. Capacity: 32 GB

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.9.1.2. Interface: USB Type-C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.9.1.3. Speed: Up to 150 MB/s read speed.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.9.1.4. Compatibility: USB-C compatible devices.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.9.1.5. Features: Durable design, fast data transfer, compact size

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.10. Accessory - Tribrach 3 Pin Type with Optical Plummet (GDM/GT)

Description: Precision tribrach with optical plummet for accurate instrument levelling.

7.10.1 The tribrach shall meet the following requirements:

7.10.1.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.10.1.2. Plummet: Optical plummet for precise centering.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.10.1.3. Compatibility: Fits standard GNSS receivers and instruments.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.10.1.4. Features: Durable construction, precise adjustment, easy to use.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.11. Receiver Transport Case

Description: Rugged transport case for the GNSS Receiver.

7.11.1. The transport case shall meet the following requirements:

7.11.1.1. Material: High-impact plastic.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.11.1.2. Dimensions: Custom-fit for GNSS receiver.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.11.1.3. Weight: Approximately 2 kg.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.11.1.4. Features: Durable construction, secure latches, padded. interior

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.12. Configuration Level - Base and Rover Mode

Description: Configuration for to operate in base and rover modes.

7.12.1. The base and rover configuration shall meet the following requirements:

7.12.1.1. Modes: LT Base mode for establishing a GNSS base station, Rover mode for field data collection.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.12.1.2. Compatibility: GNSS receiver.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.12.1.3. Configuration: Pre-set configurations for easy switching between base and rover modes.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.12.1.4. Calibration: Pre-calibrated for accuracy and performance

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.13. Pouch, 6 Ah Battery, Charger, Base Station Extender

Description: Accessory kit for GNSS Receiver, including pouch, battery, charger, and base station extender.

7.13.1. The accessory kit shall meet the following requirements:

7.13.1.1. Battery: 6 Ah rechargeable battery.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.13.1.2. Charger: Compatible with GNSS Receiver R10 batteries.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.13.1.3. Pouch: Durable carrying pouch.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.13.1.4. Base Station Extender: Enhances base station range and performance.

7.13.1.5. Features: Comprehensive kit for field use, durable and reliable components.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.14. Bracket - PDL450 Side Mount on Tripod

Description: Mounting bracket for attaching PDL450 radio to a tripod.

7.14.1. The mounting bracket shall meet the following requirements:

7.14.1.1. Material: High-strength aluminium

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.14.1.2. Compatibility: PDL450 radio and standard tripods

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.14.1.3. Features: Durable construction, easy to install, secure mounting

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.15. R10-NMO to SMA Radio Antenna Cable, 5m

Description: Radio antenna cable for GNSS Receiver R10, 5 meters in length.

7.15.1. The radio antenna shall meet the following requirements:

7.15.1.1. Length: 5 meters.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.15.1.2. Connectors: NMO to SMA.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.15.1.3. Compatibility: GNSS receiver R10 and compatible radios.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.15.1.4. Features: High-quality cable, durable connectors, reliable signal transmission.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.16. Antenna Whip - Unity Gain, 450-470MHz PDL450

Description: Unity gain antenna whip for A 450 MHz Radio Solution for Base Stations, 450-470MHz frequency range.

7.16.1. The antenna shall meet the following requirements:

- **7.16.1.1. Frequency Range**: 450-470 MHz

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.16.1.2. Gain: Unity gain (0 dB)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.16.1.3. Compatibility: A 450 MHz Radio Solution for Base Stations

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.16.1.4. length: Approximately 45 cm.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.16.1.5. Material: Durable and weather-resistant materials

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.16.1.6. Features: High-performance antenna for reliable communication, easy installation

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.17. Accessory - Tripod Heavy Duty

Description: A heavy-duty tripod designed to provide stable support for the GNSS receiver.

7.17.1. The tripod shall meet the following requirements:

7.18.1.1. Material: High-strength aluminium or composite materials.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.17.1.2. Height: Adjustable legs to accommodate various heights.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.17.1.3. Leg Locking Mechanism: Twist locks or lever locks for secure adjustments.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.17.1.4. Head: Flat or dome head compatible with GNSS Receiver.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.17.1.5. Weight: Approximately 5 kg.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.17.1.6. Features: Heavy-duty construction, spiked feet, carrying handle.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.18. Accessory - Tribrach 3 Pin Type with Optical Plummet (GDM/GT)

Description: Precision tribrach with optical plummet for accurate instrument levelling.

7.18.1. The tribrach shall meet the following requirements:

7.19.1.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.18.1.2. Plummet: Optical plummet for precise centering.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.18.1.3. Compatibility: Fits standard GNSS receivers and instruments.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.18.1.4. Features: Durable construction, precise adjustment, easy to use

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.19. Adapter - Tribrach to 5/8 with Removable Center

Description: Adapter for converting tribrach to 5/8" thread with removable center for various mounting options.

7.19.1. The adapter shall meet the following requirements:

7.20.1.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.19.1.2. Thread Size: 5/8".

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

7.19.1.3. Removable Centre: Yes.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.19.1.4. Compatibility: Fits standard tribrachs and survey equipment.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

7.19.1.4. Features: Durable construction, easy to install and remove, versatile mounting options.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8. Surveying, Imaging and 3D Scanning Station Set

8.1. High-precision total station with integrated surveying, imaging, and 3D scanning capabilities

Description: High-precision total station with integrated surveying, imaging, and 3D scanning capabilities.

8.1.1. Technical Specifications:

8.1.1.1. Key Features:

8.1.1.1.1. Integrated System: Combines survey data collection, imagery, and high-speed scans using field software and Lightning 3DM technology.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.1.2. Seamless Processing: Compatible with office software and for advanced scan processing.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.1.3. Laser Pointer: Green focusable laser pointer with the smallest spot size in the industry (6 mm at 100 m).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2. Survey Performance:

8.1.1.2.1. Angle Measurement:

8.1.1.2.1.1.Sensor Type: Absolute encoder with diametrical reading

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.1.2. Accuracy: 1” (0.3 mgon)

8.1.1.2.1.3. Display (Least Count): 0.1" (0.01 mgon)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.2. Automatic Level Compensator:

8.1.1.2.2.1. Type: Centered dual-axis

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.2.2. Accuracy: 0.5" (0.15 mgon)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.2.3. Range: ±5.4’ (±100 mgon)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.3. Distance Measurement:

8.1.1.2.3.1. Accuracy:

8.1.1.2.3.1.1. Prism Mode: Standard: 1 mm + 1.5 ppm;
Tracking: 2 mm + 1.5 ppm

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.1.1.2.3.1.1. DR Mode: Standard: 2 mm + 1.5 ppm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.3.2. Measuring Time:

8.1.1.2.3.2.1. Prism Mode: 1.6 s

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.3.2.1. DR Mode: 1.2 s

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1. 2.3.3. Range:

8.1.1.2.3.3.1. Prism Mode: 1 m–5,500 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.2.3.3.2. DR Mode: Kodak White Card: 1 m–800 m;
Kodak Grey Card: 1 m–450 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3. Scanning Performance:

8.1.1.3.1. General Scanning Specifications:

8.1.1.3.1.1. Scanning Principle: Band scanning using rotating prism in telescope

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.1.2. Measurement Rate: 26.6 kHz

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.1.3. Point Spacing: 6.25 mm, 12.5 mm, 25 mm, or 50 mm @ 50 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.1.4. Field-of-View: 360° x 300°

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.1.5. Coarse Scan: Full Dome - 360° x 300°, Density: 1 mrad, 50 mm spacing @ 50 m, Scan Time: 12 minutes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.1.1.3.1.6. Standard Scan: Area Scan - 90° x 45°, Density: 0.5 mrad, 25 mm spacing @ 50 m, Scan Time: 6 minutes.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.2. Range Measurement:

8.1.1.3.2.1. Principle: Ultra-high speed time-of-flight powered by Lightning technology

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.2.2. Range: Kodak White Card: 0.9 m–600 m; Kodak Grey Card: 0.9 m–350 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.2.2. Range Noise: @ 50 m on 18–90% reflectivity: 1.5 mm; @ 120 m on 18–90% reflectivity: 1.5 mm; @ 200 m on 18-90% reflectivity: 1.5 mm; @ 300 m on 18-90% reflectivity: 2.5 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.2.4. Scanning Angular Accuracy: 5” (1.5 mgon)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.3.2.5. 3D Position Accuracy @ 100 m: 2.5 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4. Imaging Performance:

8.1.1.4.1. Imaging Principle: 3 calibrated cameras in telescope

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.2. Field of View: 360° x 300°

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.3. Live View Frame Rate: Up to 15 fps

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.3. File Size of One Total Panorama: 15 MB – 35 MB

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.5. Panorama Measurement Time and Resolution:

8.1.1.4.5.1. Overview Panorama: Full dome 360° x 300° with 10% overlap, 2.5 mins, 40 images, 15 mm @ 50 m per pixel

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.5.2. Primary Panorama: Area capture 90° x 45° with 10% overlap, 2.5 mins, 48 images, 3.5 mm @ 50 m per pixel

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6. Cameras Specifications:

8.1.1.4.6.1. Resolution of Each Camera Chip: 8.1 MP (3296 x 2472 pix)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6.2. File Format: .jpeg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.1.1.4.6.3. Field of View (Max): 57.5° (horizontal) x 43.0° (vertical)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6.4. Field of View (Min): 0.51° (horizontal) x 0.38° (vertical)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6.5. Total Zoom (No Interpolation): 107x

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6.6. 35 mm Equivalent Focal Length: 36–3850 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6.7. Exposure Modes: Auto, spot exposure; Manual exposure brightness: ±5 steps; White balance modes: Auto, daylight, incandescent, overcast

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.4.6.8. Temperature Compensated Optics: Yes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

d

8.1.1.4.6.9. Calibrated Cameras: Yes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Overview Camera:
  - Position: Parallel to measurement axis

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - One Pixel Corresponds to: 15 mm @ 50 m.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Primary Camera:
  - Position: Parallel to measurement axis

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- One Pixel Corresponds to: 3.5 mm @ 50 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Telescope Camera:
  - Position: Coaxial

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - Focusing: Automatic, manual

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - Focusing Distance: 1.7 m to infinity

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - One Pixel Corresponds to: 0.69 mm @ 50 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Pointing Precision (Std Dev 1 Sigma): 1" (HA: 1.5 cc, VA: 2.7 cc)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Plummet Camera:
  - Usable Range: 1.0–2.5 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - Resolution on Ground: One pixel corresponds to 0.2 mm @ 1.55 m instrument height

  - Accur

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - acy: 0.5 mm @ 1.55 m instrument height

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.5. Laser Pointer:

- Color: Green, 520 nm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

- Eye Safety: Laser Class 1

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Focusing: Automatic, manual

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Operating Modes: Low-light, standard, extended range flashing

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Laser Pointer Spot Size (Full Width Half Maximum):
  - 1.3 - 50 m: 3 mm ± 1 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - 100 m: 6 mm ± 1 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- 150 m: 9 mm ± 1 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.6. System Specifications:

- IP-Rating: IP55

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Operating Temperature Range: -20 °C to 50 °C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Security: Dual layer password protection

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Servo System: MagDrive™ servo technology, integrated servo/angle sensor electromagnetic direct drive, servo-driven clamps and slow motions

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Centering System: 3-pin

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Plummets: Built-in video plummet, split optics tribrach with optical plummet

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Power Supply: Internal rechargeable Li-Ion battery, 11.1 V, 6.5 Ah; Operating time: Up to 2.25 hours with one internal battery, up to 7 hours with three batteries in multi-battery adapter and one internal battery

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Weight and Dimensions:

  - Instrument: 7.5 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

  - Tribrach: 0.7 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

- Internal Battery: 0.35 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Trunnion Axis Height: 196 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Front Lens Aperture: 56 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- Communication: Wi-Fi, Wi-Fi HaLow™, 2.4 GHz Spread Spectrum, cabled (USB 2.0); Wi-Fi/WLAN Operating Frequencies: 2412–2462 MHz; Wi-Fi HaLow Operating Frequencies: 902–928 MHz; FHSS Long Range Radio Operating Frequencies: 2401.69–2469.89 MHz

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.1.1.7. Certifications: FCC Part 15 (Class B device), CE Mark, RCM

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.2. Configuration for Standard and Laser Pointer

Description: Configuration options for the Surveying, Imaging and 3D Scanning Station Set, including standard settings and laser pointer functionality.

8.2.1. The laser pointer shall meet the following minimum requirements:

8.2.1.1. Laser Pointer: Green focusable laser pointer with a 6 mm spot size at 100 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.2.1.2. **Standard Configuration**: Pre-calibrated settings optimized for general survey applications.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.2.1.1. Operating Modes: Includes standard survey mode and laser pointer mode for precise targeting

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.2.1.3. User Interface: Easy configuration through application software.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.2.1.4. Calibration Certificate: Included for accuracy verification

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.3. Battery Charger w/Power Supply

Description: Dual battery charger with power supply, designed for South Africa power standards.

8.3.1. The battery charger shall meet the following requirements:

8.3.1.1. Charging Bays: 2

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.3.1.2. Input Voltage: 100-240 V AC

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.3.1.3. Output Voltage: 12 V DC

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.3.1.4. Charging Time: Approximately 4 hours for full charge

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.3.1.5. Compatibility: Compatible with station batteries

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.3.1.6. Indicators: LED status indicators for charging progress

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.3.1.7. Plug Type: South African plug.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.4. Geospatial Accessories - Robotic Power Kit (Power Supply)

Description: Power kit for robotic operation of geospatial instruments.

8.4.1. The robotic kit shall meet the following requirements:

8.4.1.1. Battery Type: Rechargeable Li-Ion

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.4.1.2. **Output Voltage**: 24 V DC

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.4.1.3. **Compatibility**: Compatible with station and other robotic instruments.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.4.1.4. **Charging Time**: Approximately 3 hours

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.4.1.5. **Operating Time**: Up to 12 hours on a single charge.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.4.1.5. Included Accessories: Power supply, cables, and connectors.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.5. Accessories - Tape Measure, Metric/Tenths

Description: High-quality tape measure marked in metric units and tenths.

8.5.1. The tape measure shall meet the following requirements:

- **8.5.1.1. Length**: 30 meters

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- **8.5.1.2. Graduations**: Metric and tenths

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- **8.5.1.3. Material**: Fiberglass tape with durable casing.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.5.1.4. Features: Ergonomic handle, easy-to-read markings, retractable tape.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.6. Accessory - Tripod Heavy Duty

Description: A heavy-duty tripod designed to provide stable support for the Total Station.

8.6.1. The tripod shall meet the following requirements:

8.6.1.1. Material: High-strength aluminium or composite materials.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.6.1.2. **Height**: Adjustable legs to accommodate various heights

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.6.1.3. **Leg Locking Mechanism**: Twist locks or lever locks for secure adjustments.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.6.1.4. **Head**: Flat or dome head compatible with station.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.6.1.5. **Weight**: Approximately 5 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.6.1.6. Features: Heavy-duty construction, spiked feet, carrying handle.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.7. Stage Bag For Heavy Duty Wooden Tripod

Description: Protective carrying bag for heavy-duty wooden tripod.

8.7.1. The wooden tripod bag shall meet the following requirements:

8.7.1.1. Material: Durable, weather-resistant fabric

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.7.1.2. Dimensions: Custom-fit for heavy-duty wooden tripod.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.7.1.3. Closure: Heavy-duty zipper or Velcro.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.7.1.4. Handles: Reinforced handles for easy carrying.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.7.1.5. Features: Padded interior, external pockets, durable construction.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.8. Rod - Standard Telescopic Rod 2.6m

Description: A 2.6-meter aluminium telescopic rod designed for use with instruments.

8.8.1. The telescopic rod shall meet the following requirements:

8.8.1.1. Material: Lightweight aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.8.1.2. Height: Extends up to 2.6 meters.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.8.1.3. Graduations: Metric and imperial units

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.8.1.4. Locking Mechanism: Twist-lock or snap-lock

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.8.1.5. Weight: Approximately 1.5 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.8.1.6. Features: Durable, easy to extend and collapse, clearly marked graduations.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.9. Stage Plus Bag For Prism Pole

Description: Protective carrying bag for transporting and storing a prism pole.

8.9.1. The prism pole bag shall meet the following requirements:

8.9.1.1. Material: Durable, weather-resistant fabric.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.9.1.2. **Dimensions**: Custom-fit for standard prism poles

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.9.1.3. **Closure**: Heavy-duty zipper or Velcro.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.9.1.4. **Handles**: Reinforced handles for easy carrying

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.9.1.5. Features: Padded interior, external pockets, durable construction,

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.10. Prism - 360 Prism incl height adapter to standard rod

Description: A 360-degree prism with height adapter for use with standard rods.

8.10.1. The prism shall meet the following requirements:

8.10.1.1. Material: High-quality optical glass.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.10.1.2. **Reflective Area**: 360 degrees

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.10.1.3. **Mounting**: Compatible with standard prism poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.10.1.4. **Accuracy**: ±2 mm at 30 meters

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.10.1.5. Features: Height adapter included, anti-reflective coating for enhanced signal clarity.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.11. Stage Bag For Prism

Description: Protective carrying bag for transporting and storing a traverse prism.

8.11.1. The prism bag shall meet the following requirements:

8.11.1.1. Material: Durable, weather-resistant fabric.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.11.1.2. **Dimensions**: Custom-fit for standard traverse prisms.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.11.1.3. **Closure**: Heavy-duty zipper or Velcro.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.11.1.4. **Handles**: Reinforced handles for easy carrying.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.11.1.5. Features: Padded interior, external pockets, durable construction

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.12. Handheld Controller QWERTY Keypad, USB/Serial Boot

- **Description**: Advanced field handheld controller with QWERTY keypad and multiple connectivity options.

8.12.1. The controller shall meet the following requirements:

8.12.1.1. Display: 7-inch touchscreen, sunlight-readable.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.12.1.2. **Processor**: Intel Pentium N4200.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.12.1.3. **Memory**: 8 GB RAM, 128 GB SSD.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.12.1.4. **Connectivity**: USB, Serial, Wi-Fi, Bluetooth, 4G LTE.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.12.1.5. **Operating System**: Windows 10.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.12.1.6. Battery Life: Up to 10 hours.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.12.1.8. Features: Rugged design, ergonomic keypad, integrated GNSS. receiver

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

8.13. 2.4GHz Module

Description: 2.4GHz communication module for enhanced wireless connectivity.

8.13.1. The communication module shall meet the following requirements:

8.13.1.1. Frequency: 2.4 GHz

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.13.1.2. **Range**: Up to 1 km (line of sight)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.13.1.3. **Data Rate**: Up to 250 kbps

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.13.1.4. **Power Supply**: 5V DC

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.13.1.5. **Compatibility**: Handheld controller and other compatible devices

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.13.1.5. Features: Secure wireless communication, easy installation, robust design.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.14. Accessory - Carry Case Shoulder Bag

Description: Durable shoulder bag for carrying the Handheld controller.

8.14.1. The shoulder bag shall have meet the following requirements:

8.14.1.1. Material: High-quality, weather-resistant fabric

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.14.1.2. **Dimensions**: Custom-fit for Handheld controller.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.14.1.3. **Closure**: Heavy-duty zipper

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.14.1.4. **Straps**: Adjustable shoulder strap for comfort.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.14.1.5. **Features**: Padded interior, external pockets for accessories, reinforced construction.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.15. Handheld Controller Accessory - Pole Mount

Description: Mounting bracket for attaching the handheld controller to a survey pole.

8.15.1. The mounting bracket shall meet the following requirements:

8.15.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.15.2. Adjustability: 360-degree rotation.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.15.3. Compatibility: Fits standard survey poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.15.4. Weight: Approximately 0.5 kg. The bidder shall in their tender response outline ethe weight of the proposed mounting bracket.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.15.5. Features: Durable construction, easy to attach and detach, secure grip.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.16. Handheld Controller Adjustable Arm and Quick Release Pole Mount Clamp

Description: Adjustable arm and quick release clamp for mounting Handheld Controller controllers.

8.16.1 The arm and mounting pole shall meet the following requirements.

8.16.1.1. Material: High-strength aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.16.1.1. Adjustability: Fully adjustable arm for optimal positioning.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.16.1.1. Quick Release: Easy to attach and detach the controller.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.16.1.1. Compatibility: Fits standard survey poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.16.1.1. Features: Secure grip, durable construction, lightweight design.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.17. Handheld controller Accessory - Battery Charger

- **Description**: External battery charger with internal cord for the Handheld controller.
-

8.17.1. The battery charger shall meet the following requirements:

8.17.1.1. Input Voltage: 100-240 V AC.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.17.1.2. **Output Voltage**: 12 V DC.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.17.1.3. **Charging Time**: Approximately 3-4 hours for full charge.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.17.1.4. **Compatibility**: Designed specifically for Handheld Controller batteries.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.17.1.5. **Indicators**: LED status indicators for charging progress.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

8.17.1.6. **Features**: Compact design, overcharge protection, easy-to-use. The bidder shall outline the features of the proposed battery charger.

8.17.1.7.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9. 2.4 Ghz 3'' Total Station Set

9.1. Total station with 3" angular accuracy

Description: Reliable total station with 3" angular accuracy.

9.1.1. The 2.4 Ghz 3'' Total Station Set shall meet the following requirements:

9.1.1.1. Key Features:

9.1.1.1.1. Powerful, fast EDM for long-range measuring.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.1.2. Application software onboard for topographic surveys, staking, and control.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.1.3. Fully integrated with application Software.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.1.5.. Dual colour touchscreen displays.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.1.6. L2P security location technology.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.1.7. Compact, lightweight, and rugged design.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2. Distance Measurement:

9.1.1.2.1. Range with Specified Prisms:

9.1.1.2.1.1. Single Prism: 5000 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.1.2. Reflector Sheet (5 cm x 5 cm): 300 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.2. Reflectorless Mode:

9.1.1.2.2.1. Kodak Gray Card (90% Reflectivity): 800 m (Good), 500 m (Normal), 250 m (Difficult)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.2.2. Kodak Gray Card (18% Reflectivity): 400 m (Good), 300 m (Normal), 235 m (Difficult)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.3. Accuracy in Standard Measurement Mode:

9.1.1.2.3.1. Prism: ±(2 + 2 ppm × D) mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.3.2.2. Reflectorless: ±(3 + 2 ppm × D) mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.1.1.2.4. Measuring Interval:

9.1.1.2.4.1. Standard Mode: Prism Mode: 1.0 s; Reflectorless Mode: 1.0 s

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.4.2. Fast Standard Mode: Prism Mode: 0.5 s; Reflectorless Mode: 0.5 s

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.2.4.3. Tracking Mode: Prism Mode: 0.3 s; Reflectorless Mode: 0.3 s

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.3. Angle Measurement:

9.1.1.3.1. Accuracy (Standard Deviation based on ISO 17123-3): 1” (0.3 mgon), 2” (0.6 mgon), 3” (1.0 mgon), 5” (1.5 mgon)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.3.2. Reading System: Absolute encoder

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.1.1.3.3. Circle Diameter: 62 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.3.4. Horizontal/Vertical Angle: Diametrical/Single

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4. Telescope:

9.1.1.4.1. Tube Length: 128 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.2. Image: Erect

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.3. Magnification: 30× (19x/38x with optional eyepieces)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.4. Effective Diameter of Objective: 45 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.5. Field of View: 1° 25’

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.6. Resolving Power: 3”

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.7. Minimum Focusing Distance: 1.5 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.8. Laser Pointer: Coaxial Red Light

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.9. Tracklight: Yes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.4.10. Reticle Illumination: Yes, 4 steps

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.5. Tilt Sensor:

9.1.1.5.1. Type: Dual-axis

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.5.2. Method: Liquid-electric detection

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.5.3. Compensation Range: ±3’

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.6. Communications:

9.1.1.6.1. Communication Ports: 1 x serial (RS-232C), 2 x USB (host and client)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.6.2. Wireless Communications: Integrated Bluetooth®

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.7. Power:

9.1.1.7.1. Internal Li–ion Battery (x2)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.7.2. Output Voltage: 3.6 V

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.7.3. Operating Time:

9.1.1.7.3.1. Continuous Angle-Only Measurement: 14 h

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.1.1.7.3.1. Distance/Angle Measurement/Autofocus every 30 s: 12 h

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.7.3.1. Continuous Distance/Angle Measurement: 7 h

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.7.3.1. Charging Time, Full Charge (Both Batteries): approx. 6 h

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8. General Specifications:

9.1.1.8.1. Autofocus: Yes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.2. Level Vials:

9.1.1.8.2.1. Sensitivity of Circular Level Vial on Tribrach: 10'/2 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.3. Tangent Clamps: Yes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.4. Display Face 1: LCD back-lit (640 x 480 pixel)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.5. Display Face 2: LCD back-lit (640 x 480 pixel)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.6. Operating System: Windows® Embedded Compact 7 or Higher

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.7. Processor: Dual Core 800 MHz

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.8. Point Memory: 512 MB RAM, 4 GB flash memory

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.9. Internal Plummet: Optical or Class 2 Laser

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.10. Optical Plummet:

9.1.1.8.10.1. Magnification: 3x

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.10.2. Field of View: 5°

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.10.3. Minimum Focusing Distance: 0.5 m

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.11. Dimensions (W x D x H): 206 mm x 169 mm x 318 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.12. Weight (approx.):

9.1.1.8.12.1. Main Unit: 4.3 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.12.2. Battery: 0.1 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.8.12.3. Carrying Case: 3.3 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9. Environmental:

9.1.1.9.1. Operating Temperature Range: -20 °C to +50 °C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9.2. Winterized Operating Temperature Range: -30 °C to +50 °C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9.3. Storage Temperature Range: -25 °C to +60 °C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9.4. Winterized Storage Temperature Range: -30 °C to +60 °C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9.5. Atmospheric Correction:

9.1.1.9.5.1. Temperature Range: -40 °C to +60 °C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9.5.2. Barometric Pressure: 400 mmHg to 999 mmHg / 533 hPa to 1332 hPa / 15.8 inHg to 39.3 inHg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.9.6. Dust and Water Protection: IP66

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.10. Certification:

9.1.1.10.1. Class B Part 15 FCC certification, CE Mark approval, RCM Mark

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.10.2. IEC60825-1 am 2007, IEC60825-1 am 2014, FDA notice 50

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.10.3. Prism/Reflectorless Mode: Class 1 laser

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1.1.10.4. Laser Plummet/Laser Pointer: Class 2 laser

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.1. Screen Protectors - Anti Glare

Description: Anti-glare screen protectors designed to protect the display.

9.2.1. Technical Specifications:

9.2.1.1. Material: High-quality anti-glare film

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.2.1.2. **Compatibility**:Total Station screen

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.2.1.3. Features:

9.2.1.3.1. Reduces glare and reflections for better visibility in bright conditions

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.2.1.3.1. Protects against scratches, dust, and fingerprints

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.2.1.3.2. Easy to apply and remove without leaving residue

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.2.1.3.3. Durable and long-lasting

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3. Accessory - Tripod Heavy Duty

Description: A heavy-duty tripod designed to provide stable and secure support for the Total Station during surveying operations.

9.3.1. The tripod shall meet the following requirements:

9.3.1.1. Material: High-strength aluminium or composite materials

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.2. Height: Adjustable legs to accommodate various heights

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.3. **Leg Locking Mechanism**: Twist locks or lever locks for secure and quick adjustments

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.4. **Head**: Flat or dome head compatible with the Total Station

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.5. **Weight**: Approximately 5 kg. The bidder to indicate the weight of the proposed tripod.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.6. Features:

9.3.1.6.1. Heavy-duty construction for stability and durability

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.6.2. Spiked feet for secure placement on different terrains

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.3.1.6.3. Carrying handle for easy transport

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.4. Stage Bag for Heavy Duty Wooden Tripod

- **Description**: A protective carrying bag designed for transporting and storing the heavy-duty wooden tripod.

9.4.1. The wooden tripod bag shall meet the following requirements:

9.4.1.1. Material: Durable, weather-resistant fabric

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.4.1.2. Dimensions: Custom-fit for the heavy-duty wooden tripod

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.4.1.3. Closure: Heavy-duty zipper or Velcro closure

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.4.1.4. Handles: Reinforced handles for easy carrying

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.4.1.4. Features:

9.4.1.5.1. Padded interior for added protection

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.4.1.5.2. External pockets for accessory storage

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.4.1.5.3. Durable construction for long-term use

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5. Rod - 2.6m Aluminium Telescopic Rod

- **Description**: A 2.6-meter aluminum telescopic rod designed for use with the Total Station.
- **9.5.1. The telescopic rod shall have the rod shall meet the following:**

9.5.1.1. Material: Lightweight aluminum

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.2. Height: Extends up to 2.6 meters

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.3. Graduations: Marked in metric and imperial units for precise measurements

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.4. Locking Mechanism: Twist-lock or snap-lock for secure height adjustments

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.5. Weight: Approximately 1.5 kg. The bidder to provide the weight of the proposed telescopic rod.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.1. Features:

9.5.1.5.1. Durable and lightweight construction

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.5.1. Easy to extend and collapse

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.5.1.5.1. Clearly marked graduations for accurate readings

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6. Stage Bag for Prism Pole

- **Description**: A protective carrying bag designed for transporting and storing a prism pole.

9.6.1. The prism pole bag shall meet the following requirements:

9.6.1.1. Material: Durable, weather-resistant fabric

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6.1.2. Dimensions: Custom-fit for standard prism poles

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6.1.3. Closure: Heavy-duty zipper or Velcro closure

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6.1.4. Handles: Reinforced handles for easy carrying

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6.1.5. Features:

9.6.1.5.1. Padded interior for added protection

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6.1.5.1. External pockets for accessory storage

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.6.1.5.1. Durable construction for long-term use

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.7. Traverse Prism

Description: A traverse prism with anti-reflective (AR) coating for improved signal reflection and accuracy in surveying applications.

9.7.1. Technical Specifications:

9.7.1.1. Material: High-quality optical glass with AR coating

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.7.1.2. Reflective Area: Standard size compatible with instruments

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- **9.7.1.3. Mounting**: Compatible with standard prism poles and tribrachs

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- **9.7.1.4. Accuracy**: ±2 mm at 30 meters

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- **9.7.1.5. Features**:

9.7.1.5.1. Anti-reflective coating for enhanced signal clarity

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.7.1.5.2. High precision for accurate distance measurements

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.7.1.5.3. Durable construction for field use

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8. Stage Bag for Prism

Description: A protective carrying bag designed for transporting and storing a traverse prism.

9.8.1. The prism carry bag shall meet the following requirements:

9.8.1.1. Material: Durable, weather-resistant fabric

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8.1.2. Dimensions: Custom-fit for standard traverse prisms

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8.1.3. Closure: Heavy-duty zipper or Velcro closure

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8.1.4. Handles: Reinforced handles for easy carrying

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8.1.5. Features:

9.8.1.5.1. Padded interior for added protection

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8.1.5.2. External pockets for accessory storage

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.8.1.5.3. Durable construction for long-term use

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9. Medium Duty Aluminium Tripod

Description: A medium-duty aluminium tripod designed to provide stable support for the Total Station and other survey instruments.

9.9.1. The tripod shall meet the following requirements:

9.9.1.1. Material: Lightweight aluminium

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9.1.2. Height: Adjustable legs to accommodate various heights

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9.1.3. Leg Locking Mechanism: Twist locks or lever locks for secure and quick adjustments

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9.1.4. Head: Flat or dome head compatible with the Total Station

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9.1.5. Weight: Approximately 3 kg. The bidder to clearly indicate the weight of the proposed tripod.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

9.9.1.6. Features:

9.9.1.6.1. Lightweight yet durable construction

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9.1.6.2. Spiked feet for secure placement on different terrains

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

9.9.1.6.3. Carrying handle for easy transport

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10. Matrix Drone Set

10.1. Matrix 3Drone

Description: Advanced drone with Real Time Kinematic (RTK) capabilities for high-precision aerial surveys.

10.1.1. **The matrix drone shall meet the following requirements:**

10.1.1.1. Key Features:

10.1.1.1.1. All-new video transmission system and control experience.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.1.1.1.2. Efficient battery system with comprehensive safety features.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.1.1.1.3. Robust payload and expansion capabilities.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.1.1.2. Aircraft:

10.1.1.2.1. Dimensions: 810×670×430 mm (Unfolded, propellers excluded); 430×420×430 mm (Folded, propellers included).

10.1.1.2.2. Diagonal Wheelbase: 895 mm.

10.1.1.2.3. Max Take-off Weight: 9.2 kg.

10.1.1.2.4. Single Gimbal Damper’s Max Payload: 960 g.

10.1.1.2.5. Weight: Without batteries ± 3.77 kg; with 2x batteries ± 6.47 kg.

10.1.1.2.6. Operating Frequency:

10.1.1.2.6.1. 2.400 GHz - 2.483 GHz, <33 dBm FCC

10.1.1.2.6.2. 5.150 GHz - 5.250 GHz, <20 dBm CE/SRRC/MIC

10.1.1.2.6.3. 5.725 GHz - 5.850 GHz, <33 dBm FCC/SRRC; <14 dBm CE.

10.1.1.2.7. Hovering Accuracy:

10.1.1.2.7.1. Vertical: ±0.1 m (Vision System enabled), ±0.5 m (GPS enabled), ±0.1 m (RTK enabled).

10.1.1.2.7.2. Horizontal: ±0.3 m (Vision System enabled), ±1.5 m (GPS enabled), ±0.1 m (RTK enabled).

10.1.1.2.8. Max Angular Velocity: Pitch: 300°/s, Yaw: 100°/s.

10.1.1.2.9. Max Pitch Angle: 30° (N-mode), 25° (Forward Vision System enabled).

10.1.1.2.10. Max Ascent Speed: 6 m/s.

10.1.1.2.11. Max Descent Speed: Vertical: 5 m/s, Tilt: 7 m/s.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.1.1.2.12. Max Speed: 23 m/s.

10.1.1.2.13. Max Wind Resistance: 12 m/s.

10.1.1.2.14. Max Flight Time: 55 min.

10.1.1.2.15. Max Flight Altitude Above Sea Level: 5000 m (with 2110 propellers, take-off weight ≤ 7.4 kg), 7000 m (with 2112 propellers, take-off weight ≤ 7.2 kg).

10.1.1.2.16. Supported Gimbals: Zenmuse H20/H20T/H20N/P1/L1.

10.1.1.2.17. Supported Gimbal Configurations: Single DownwardGimbal, Dual Downward Gimbals, Single Downward + Single Upward Gimbal, Dual Downward + Single Upward Gimbal.

10.1.1.2.18. Environmental Rating: IP55.

10.1.1.2.19. GNSS: GPS+GLONASS+BeiDou+Galileo.

10.1.1.2.20. Operating Temperature: -20° to 50°C.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.1.1.3. Remote Controller

10.1.1.3.1. Screen: 7.02-inch LCD touchscreen.

10.1.1.3.2. Resolution: 1920×1200.

10.1.1.3.3.- Max Brightness: 1200 nits.

10.1.1.3.4. Weight: Approx. 1.25 kg (without battery), Approx. 1.42 kg

10.1.1.3.5. Global Navigation Satellite System: GPS+Galileo+BeiDou.

10.1.1.3.6. Ingress Protection Rating: IP54.

10.1.1.3.7.1. Capacity: 4920 mAh.
10.1.1.3.7.2. Voltage: 7.6V.
10.1.1.3.7.2. Type: Li-ion.
10.1.1.3.7.4. Energy: 37.39Wh.
10.1.1.3.7.4. Charging Type: Battery station or USB-C fast charger max 65W / 20V.
10.1.1.3.7.5. Charging Time: 2 HRS.

10.1.1.3.8. Built-in Battery:

10.1.1.3.8.1. Type: Li-ion (6500 mAh @ 7.2 V).
10.1.1.3.8.1. Charging Type: Battery station or USB-C fast charger max 65W / 20V.

10.1.1.3.9. Operating Frequency:

10.1.1.3.9.1. 2.400 GHz to 2.483 GHz, <33 dBm FCC.
10.1.1.3.9.2. 5.725 GHz to 5.850 GHz, <20 dBm CE/SRRC/MIC.
10.1.1.3.9.3. 5.725 - 5.850 GHz, <33 dBm FCC; <14 dBm CE; <23 dBm SRRC.

10.1.1.3.10. Wi-Fi Protocol: Wi-Fi 6.

10.1.1.3.11. Wi-Fi Operating Frequency: 2.4000-2.4835 GHz, 5.150-5.250 GHz, 5.725-5.850 GHz.

10.1.1.3.12. Bluetooth Protocol: Bluetooth 5.1.

10.1.1.3.13. Bluetooth Frequency: 2.4000-2.4835 GHz.

10.1.1.3.14. Operating Temperature: -20° to 50°C.

10.1.1.3.15. Operating Time:

10.1.1.3.15.1. Built-in Battery: ± 3.3 hrs.
10.1.1.3.15.2. Built-in Battery + Ext Battery: ±6 hrs.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.1.1.4. Video Transmission:

10.2. Video Transmission System:Enterprise Transmission.

10.3. Antenna: 4 video transmission antennas, 2T4R.

10.4. Max Transmission Distance:

10.4.1. Unobstructed, free of interference: 20 km (FCC), 8 km (CE/SRRC/MIC).

10.4.2. With interference:

10.4.2.3. Low Interference and Obstructed by Buildings: approx. 0-0.5 km.

10.4.2.4. Low Interference and Obstructed by Trees: approx. 0.5-3 km.

10.4.2.5. Strong Interference and Unobstructed: urban landscape, approx. 1.5-3 km.

10.4.2.6. Medium Interference and Unobstructed: suburban landscape, approx. 3-9 km.

10.4.2.7. Low Interference and Unobstructed: suburb/seaside, approx. 9-20 km.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.2.8. **Vision System**:

10.4. Obstacle Sensing Range:

10.4.1. Forward/Backward/Left/Right: 0.7-40m.

10.4.2. Upward/Downward: 0.6-30m.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.5. Field of View:

10.5.1. Forward/Backward/Downward: 65° (H) / 50° (V).

10.5.2. Left/Right/Upward: 75° (H) / 60° (V).

10.6. Operating Environment: Surfaces with clear patterns and adequate lighting (> 15 lux).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.3. **Infrared Sensing System**:

10.7. Obstacle Sensing Range: 0.1 - 8m.

10.8. Field of View: 30° (± 15°).

10.9. Operating Environment: Large, diffuse, and reflective obstacles (reflectivity >10%).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.9.1.3. **LED Auxiliary Light**:

10.10. Effective Lighting Distance: 5 m.

10.11. Illumination Type: 60 Hz, solid glow.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.11.1.3. **FPV Camera**:

10.12. Resolution: 1080p.

10.13. Field of View: 142°.

10.14. Frame Rate: 30 fps.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.14.1.3. **Intelligent Flight Battery**

10.15. Capacity: 5880 mAh.
10.16. Voltage | Energy: 11.76 V | 263.2 Wh.
10.17. Battery Type: Li-ion.
10.18. Charging Temperature: -20° to 40°C.
10.19. Net Weight: ± 1.35 kg.
10.20. Operating Temperature: -20° to 50°C.
10.21. Charging Time:
10.21.1. Using BS65 220V Intelligent Battery Station: 60 MIN (fully charging two batteries), 30 MIN (charging two batteries from 20% to 90%).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.21.1.3. **Intelligent Battery Station**

10.22. Dimensions: 580 x 358 x 254mm.
10.23. Net Weight: 8.98kg.
10.24. Compatible Stored Items: Intelligent Flight Battery × 8, Intelligent Battery × 4.
10.25. Operating Temperature: -20°C to 40°C.
10.26. Max Input Power: 1070 W.
10.27. Input: 220-240 VAC, 50-60 Hz.
10.28. Output Power: 220-240 V: 992 W.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2. Intelligent Battery Station

Description: An advanced battery management system designed to charge and store multiple intelligent flight batteries simultaneously, ensuring efficient power management for UAV operations.

10.2.1. The battery station shall meet the following requirements:

10.2.1.1. Dimensions: 580 mm x 358 mm x 254 mm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.2. Net Weight: 8.98 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.3. Compatible Stored Items:
10.2.1.3.1. Intelligent Flight Battery x 8

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.3.2. Intelligent Battery x 4

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.4Input Power:
10.2.1.4.1. Voltage: 220-240 VAC

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.1.2.4.2. Frequency: 50-60 Hz

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.5. Output Power:

10.2.1.5.1. 220-240 V: 992 W

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.6. Charging Time:

10.2.1.6.1. Fully charges two batteries in 60 minutes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.6.2. Charges two batteries from 20% to 90% in 30 minutes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.8. Operating Temperature: -20°C to 40°C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

- **10.2.1.9. Features**:

10.2.1.9.1. Intelligent power distribution

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.9.2. Overcharge and overheat protection

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.2.1.9.3. User-friendly interface with status indicators

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3. A High-Capacity Battery

Description: A high-capacity battery designed for long flight durations and high performance in various UAV applications.

10.3.1. The battery shall meet the following requirements:

10.4.1.1. Capacity: 5880 mAh

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.3.1.2. Voltage: 11.76 V

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.3. Energy: 263.2 Wh

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.4. Battery Type: Li-ion

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.5. Net Weight: ± 1.35 kg

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.6. Operating Temperature: -20°C to 50°C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.3.1.7. Charging Temperature: -20°C to 40°C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.8. Charging Time:

10.431.8.1. Using BS65 220V Intelligent Battery Station: 60 MIN (fully charging two batteries)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.8.2. 30 MIN (charging two batteries from 20% to 90%)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.3.1.9. Features:

10.4.1.9.1. Built-in intelligence for optimal performance and safety

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.1.9.2. Durable design for extended life cycles

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.1.9.3. Compatible with Matrix RTK

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4. Ground Control Point Kit LP800 + 5pk GCP + Bag + Mallot + 20 Pegs

Description: A comprehensive ground control point (GCP) kit designed for accurate georeferencing in UAV-based surveys.

10.4.1. The ground control point kit shall meet the following requirements:

10.4.1.1. 5X LP800 Ground Control Points:

10.5.1.1.1. Durable and weather-resistant

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.5.1.1.2. High-contrast design for easy visibility

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.5.1.1.3. Pre-calibrated for accuracy

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.1.2. Bag:

10.5.1.2.1. Custom-designed carrying bag for easy transportation and storage

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.1.2.2. Padded compartments for protection

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.1.3. Mallot:

10.5.1.3.1. Heavy-duty mallot for secure placement of GCPs

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.4.1.4. 20X Pegs:

10.5.1.4.1. High-strength pegs for anchoring GCPs

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.5.1.4.2. Corrosion-resistant for durability

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.5. High-Resolution Camera

Description: A high-resolution camera designed for photogrammetry and surveying, offering superior image quality and efficiency.

10.6.1. The high-resolution camera shall meet the following requirements:

10.6.1.1. Sensor: Full-frame CMOS sensor

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.2. Resolution: 45 megapixels

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.3. Pixel Size: 4.4 µm

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.4. Lens: 35mm lens with low distortion

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.5. Image Formats: JPEG, RAW (DNG)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.6. Global Shutter: Yes

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.7. Mechanical Shutter Speed: 1/2000 seconds

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.8. Electronic Shutter Speed: 8-1/8000 seconds

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.9. ISO Range: 100-25600

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.10. Capture Modes:

10.6.1.10.1. Single Shot

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.10.2. Interval

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.10.3. Mapping (2D, 3D)

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.11. GNSS: Built-in GNSS for precise georeferencing

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.12. Operating Temperature: -20°C to 50°C

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.13. Dimensions: 198 mm x 166 mm x 129 mm

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.6.1.14. Weight: 800 g

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.15. Compatibility: Compatible with Matrix RTK

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.16. Features:

10.6.1.16.1. High dynamic range (HDR) imaging

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.16.2. Real-time, centimeter-level positioning data

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

10.6.1.16.3. Smart Oblique Capture for efficient aerial surveys

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

10.6.1.16.14. Integrated GNSS for accurate positioning

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11. Additional Models

11.4. Photogrammetry Module

Description: Software module designed to enhance existing hardware with advanced photogrammetric processing capabilities.

11.1.1. The photogrammetry module shall meet the following requirements:

11.1.1.1. Key Features:

11.1.1.1.1. Integration with application software for seamless workflow.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.1.2. Automated aerial triangulation and dense point cloud generation.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.1.3. Orthophoto production with high accuracy.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.1.4. 3D textured mesh creation.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.1.5. Advanced ground control point (GCP) management.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.1.6. Support for multiple image formats and sensor models.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.1.7. High-performance processing for large datasets.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2. Software Capabilities:

11.1.1.2.1. Aerial Triangulation: Automatic tie point extraction and bundle block adjustment.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2.2. Dense Point Cloud Generation: Accurate 3D reconstruction from multiple overlapping images.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2.3. Orthophoto Production: Generation of georeferenced orthomosaic images with uniform scale.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2.4. 3D Mesh Creation: Creation of textured 3D models for visualization and analysis.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2.5. GCP Management: Tools for importing, editing, and optimizing ground control points.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2.6. Support Formats: JPEG, TIFF, PNG, and more.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.2.7. Sensor Models: Support for various aerial and terrestrial sensors.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.3. System Requirements:
11.1.1.3.1. Operating System: Windows 10 (64-bit) or later.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.3.2. Processor: Intel i7 or equivalent.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.3.3.1RAM: Minimum 16 GB, recommended 32 GB.

COMPLIANCE (C/PC/NC)	

[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

11.1.1.3.4. Graphics Card: NVIDIA GeForce GTX 1070 or higher.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.1.1.3.5. Storage: Minimum 500 GB SSD.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2. Scanning Module

Description: Scanning module designed to add advanced scanning capabilities to existing hardware.

11.2.1. The scanning module shall meet the following requirements**:**

11.2.1.1. Key Features:

11.2.1.1.1. High-speed 3D scanning with advanced point cloud processing.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.1.2. Integration with applicable software.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.1.3. Real-time data capture and processing.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.1.4. Enhanced accuracy and resolution for detailed surveys.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.2. Scanning Capabilities:

11.2.1.2.1. Measurement Rate: Up to 1 million points per second.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.2.2. Range: Up to 350 meters with high accuracy.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.2.3. Accuracy: ±1 mm.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.2.4. Resolution: 1.5 mm @ 10 meters.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.2.5. Field of View: 360° horizontal, 300° vertical.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.3. Data Processing:

11.2.1.3.1. Point Cloud Registration: Automatic and manual registration of point clouds.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.3.2. Filtering: Advanced noise filtering and point cloud cleaning tools.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.3.3. Meshing: Generation of surface meshes from point clouds.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.3.4. Analysis: Volume calculation, cross-section creation, and other analytical tools.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.4. System Requirements:

11.2.1.4.1. Operating System: Windows 10 (64-bit) or later.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.4.2. Processor: Intel i7 or equivalent.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.4.3. RAM: Minimum 32 GB.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.4.4. Graphics Card: NVIDIA GeForce GTX 1080 or higher.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

11.2.1.4.5. Storage: Minimum 1 TB SSD.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12. Accessories

12.1. Lithium-ion Battery Pack

Description: Lithium-ion battery pack designed for industrial use, providing reliable power for survey equipment.

12.1.1. The battery packs shall meet the following requirements:

12.1.1.1. Battery Type: Lithium-ion (Li-Ion).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.1.1.2. Configuration: 2S2P (2 cells in series, 2 parallel).

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.1.1.3. Voltage: 7.4V.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.1.1.4. Capacity: 3700mAh.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.1.1.5. Dimensions: 78.4 mm x 54.3 mm x 25 mm.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.1.1.6. Applications: Suitable for powering various survey. equipment and accessories described in the tender document.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.1.1.7. Features: High energy density, long cycle life, stable performance under various environmental conditions. The bidder to outline the battery features with tender response.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

○

12.2. Rod - Bipod for Range Pole (GDM/GTR/ATS)

Description: Stabilizing bipod designed for use with range poles in geodetic, topographic, and construction surveys.

12.2.1. The stabilizing bipod shall meet the following requirements

12.2.1.1. Material: High-strength aluminium alloy.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.2.1.2. Compatibility: Compatible with GDM, GTR, ATS range poles.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.2.1.3. Height Adjustment: Quick-release clamps for easy height adjustments.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.2.1.4. Leg Extension: Telescopic legs with pointed tips for stability on various terrains.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.2.1.5. Weight: Lightweight for easy portability. The bidder to indicate the weight with the tender response.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.2.1.6. Features: Durable construction, easy to set up and transport, provides stable support for precise measurements. The bidder to outline feature with their tender response.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.3. Laser Range Finder

- **Description**: High-accuracy laser range finder for measuring distances in field surveys.
  12.3.1. The laser range finder shall meet the following requirements:

    12.3.1.1. Measurement Range: Up to 1000 meters.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

    12.3.1.2. Accuracy: ±1 meter.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.3.1.3. Display: Digital readout with backlight.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.3.1.4. Laser Type: Class 1 eye-safe laser.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.3.1.5. Power Supply: Rechargeable battery.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.3.1.6. Durability: Water-resistant and shockproof design.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.3.1.7. Features: Lightweight, easy to operate, provides accurate and quick distance measurements. The bidder to outline in their tender response the features of their proposed laser rander finder.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.4. 4.7m Twist Lock Telescopic Prism Pole

Description: Telescopic prism pole with twist-lock mechanism, ideal for precise measurements in surveying.

12.4.1. The telescopic prism pole shall meet the following requirements:

12.4.1.1. Length: Extends up to 4.7 meters.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.4.1.2. Material: Lightweight, durable aluminium.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.4.1.3. Locking Mechanism: Twist-lock for secure height adjustment.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.4.1.4. Graduations: Marked in both metric and imperial units.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.4.1.5. Weight: Lightweight for easy handling. The bidder to indicate the weight of prism pole

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.4.1.6. Features: Compact when collapsed, easy to transport, stable and secure when extended. The bidder to elaborate the prism pole features with the tender response.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5. High Resolution Digital Wireless Camera

Description: High-resolution digital camera with wireless capabilities for capturing detailed images in the field.

12.5.1 The high resolution digital wireless camera shall meet the following minimum requirements:

12.5.1.1. Resolution: 7.1 megapixels.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5.1.2. Lens: 3x optical zoom.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5.1.3. Display: 3.0-inch LCD screen.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5.1.4. Wireless Connectivity: Built-in Wi-Fi for easy transfer of images.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5.1.5. Battery: Rechargeable lithium-ion battery.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5.1.6. Storage: Supports SD/SDHC memory cards.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

12.5.1.7. Features: Compact design, easy to use, provides high-quality images suitable for documentation and analysis in surveys. The bidder to outline the feature of the proposed digital camera with their tender response.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

Chapter 2: Volume 3
Project Management

1. Delivery Leadtime

1.1. The tender to outline the delivery lead-times for the equipment to be delivered under the contract to come of this tender.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

2. Contract Data Requirement List

1.2. The Tenderer to note the deliverables, both technical and logistics, to come out of this tender. The Tenderer to provide a CDRL document.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

Chapter 3: Volume 4
Logistics Support

1. Design Life

1.1. All equipment and software have a minimum design life of at least 10 years. The Tenderer shall state the minimum design life of their proposed sets of Equipment.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

1.2. The Tenderer to outline the manufacturers proposed equipment and software maintenance and support requirements to support the design life.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

2. Package Handling Storage and Transport

2.1. The Tenderer shall be responsible for all logistics aspects of the supply and delivery of equipment sets.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

2.1. The Contractor shall be responsible for all import duties and associated storage for equipment to be delivered.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

3. Documentation

3.1. Operator and training manuals to be delivered under this contract shall be in English.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

3.2. The Tenderer to outline any other documents to be delivered under the contract to come out of this tender.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4. Training

4.1. Training to cater for 4 ATNS personnel

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.2. Training shall be catered for the following areas and equipment.

4.2.1. Software and hardware operation

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.2.2. Drone Intro & Operation Course

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.2.3. Training: Drone Data Processing

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.2.4. Photogrammetry Module

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.2.5. Scanning Module

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.2.6. Any other area and equipment deemed necessary and critical for the operation and handling of the survey equipment.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

4.3. Training manuals shall be in English.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

5. Software Licensing

5.1. All software to come out of the contract shall carry perpetual licences.
5.1.1. General Survey; Perpetual License

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

6. Warranty

6.1. The Contractor shall provide a full warranty of at least two years for equipment sets- covered under this tender.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

6.2. The warranty period shall start after delivery to the designated address, inspection of the delivery, testing of the equipment sets and signing of on a delivery note.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	

6.3. The warranty shall cover the repair and or replacement of any faults or errors in either hardware or software of deliverables under this tender.

COMPLIANCE (C/PC/NC)	
[INSERT FULL RESPONSE FOR EVALUATION HERE]	
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]	