

Annexure A

3 x TC 3846-6 2W/4W E&M 600 Ohm and Dry Contact over IP Gateway or Equivalent



Connection Capacity

1. **600 ohm (2/4 Wire) 1, 2, or 4 Ports**
2. **Dry Contact 1, 2, or 4 Ports**
3. **Gigabit Ethernet 1 Port**

Electrical

1. Dry Contact Interface
2. **Normal open Standard**
3. **Normal close Optional**
4. **Max Load Voltage 60V**
5. **Continuous load current 0.55A**
6. **Peak load current 1.2A**
7. **Detector max input voltage 9V**
8. 600 ohm Analog Interface
9. **Impedance 600Ω**
10. **Max Input 3Vp-p**
11. **Frequency band 300 to 3400Hz**
12. **Connector RJ11**



13. Ethernet Interface
14. **Standards** *IEEE 802.3, 802.3u*
15. **Connector** *RJ45*
16. Console Interface
17. **Connector** *2.5mm Audio Jack*

Regulatory Approval

1. CE, FCC Part 15, CISPR (EN55022) CLASS A, IEC 61850-3, IEEE 1613, NEMA TS-2

Diagnostic Functions

1. Local and Remote Loopback for Analog and Dry Contact

LEDs

1. **Unit Status** *PWR (A, B), Alarm, BU, PL, Vcc, BP, MGM*
2. **Analog** *On, Sync*
3. **Dry Contact** *Detector, Relay*

Power

1. **Standard** *12VDC*
2. **Optional** *24VDC, -48VDC or 125VDC (1U/ 2U/ 4U only), 90-260 VAC, 50/60Hz*
3. **Power Consumption** *< 10W*

Operating Temperature

1. **Hi-Temp** *-20°C to 70°C*
2. **Extreme Temp** *-40°C to 80°C*

Storage

1. **Temperature** *-40°C to 90°C*
2. **Humidity** *95% non-condensing*

Physical (4-Channel Standalone)

1. **Height** *(3.15 cm) 1.24"*
2. **Width** *(17.78 cm) 7.0"*
3. **Depth** *(22.86 cm) 9.0"*
4. **Weight** *(0.3 kg) 0.75 lbs*

3 x IP Tube VF 4-Wire E&M Analog Over IP or Equivalent



Supported LAN Network Interface	<ul style="list-style-type: none"> Two 10/100BaseT Full/Half Ethernet
LAN Network Protocols Supported	<ul style="list-style-type: none"> IP, TCP, UDP, ICMP, Telnet, DHCP, DDNS, SSH
Dimensions	<ul style="list-style-type: none"> 9" (L) x 7.3" (W) x 1.50" (H)
Environmental	<ul style="list-style-type: none"> 0° to 132° F (-10° to 50°C) operating temperature Up to 90% operating humidity (non-condensing)
Regulatory	<ul style="list-style-type: none"> CE



	<ul style="list-style-type: none"> • Safety -IEC60950 • EMC - CFR 47 Part 15 Sub Part B: 2002,EN55022:1994+A1, EN55024:1997, CISPR 22 Level A • 4, ICES-003 1997, CISPR 22 Level A • Telecom TBR12, TBR13 	
<p>Management</p>	<ul style="list-style-type: none"> • Secure Socket Shell - SSH V2 • Telnet support with Edit and Paste Template Files • Console Port for Out of Band Management • SNMP Public and Private MIB support with configured traps • Online Upgrade Capable (FLASH ROMs) • IPTube is fully operational during upgrade 	
<p>Diagnosics</p>	<ul style="list-style-type: none"> • Local Loop, Remote Loop 	
<p>Power</p>	<ul style="list-style-type: none"> • 12-30 VDC, 1.0A. • Optional -48V 0.25 Amp • Screw Locking Connector • Universal Adapter 100/240 VAC 50/60 Hz 	



	<ul style="list-style-type: none"> ● Hot Standby
4-Wire Analog VF Voice Grade Interface	<ul style="list-style-type: none"> ● One to Four: 4-Wire Full Duplex with PTT Relay Support independent Transmit and Receive
	<ul style="list-style-type: none"> ● 600 Ohm Balanced
	<ul style="list-style-type: none"> ● Frequency 200 to 3400 Hert
Quality of Service Support	<ul style="list-style-type: none"> ● IP Type of Service (TOS) ● IANA Registered UDP Port 3175 ● 802.1p/q mac level prioritization

Specifications references:

TC Communications TC 3846-6 2W/4W E&M 600 Ohm and Dry Contact over IP, viewed 13 May 2022,

<https://www.tccomm.com/FiberOpticProducts/Products/Multiplexers/Ethernet/199/Analog-and-Dry-Contact-to-IP>

Engage Communication IP Tube VF 4-Wire E&M Analog over, viewed 13 May 2022,

<https://www.engageinc.com/products/analog-to-ethernet/4-wire-analog-to-ethernet/ip-tube-vf-4-wire-e-m.html>