# automatedcontrol

Technical data MTL industrial network solutions

April 2020 EPS 9476-ET(G)Rev 2

# 9476-ET(G)

# Intrinsically Safe Gigabit Ethernet 6 Port Managed Switch

- Intrinsically Safe ATEX / IECEx Certification
- 6 Port Switch 10/100/1000Mbps LAN
- 6x Gigabit Ports or Mixed Gigabit and 10/100 PoEx Versions
- **CPU Management Feature**
- Compact dimensions (W: 40 x H: 160 x D: 140 mm)
- Ex ia IIB T4 Ga, [Ex ia Da] IIIC (non-mining), Ex ia I Ma (M1 mining).
- Ta = -40°C to +70°C
- Zone 1 / Zone 21 mounting (Zone 0 / Zone 20 with a suitable Ex ia Power Supply)



The 9476-ET(G) is an Intrinsically Safe (IS) 6-Port Managed Ethernet Switch suitable for Zone 1 / Zone 21 mounting, (Zone 0 / Zone 20 with a suitable Ex ia Power Supply).

The 6x RJ45 (LAN) ports support 10/100/1000 IS Ethernet connections. Available in 6 Port Gigabit and also Mixed Gigabit and 10/100 + PoEx versions to suit various applications.

Power (12V DC) is supplied to the module locally along with Power over Ethernet (PoEx) for the connected devices where required.

Note: PoEx not available on Gigabit ports

The compact and cost effective design makes it the ideal choice for many applications:

> Petrochem -Process Monitoring & Control...

Mining -**Underground Communication** Links, PLC and Machine Monitoring...

Electrical connections are via cage-clamp and/or screw type plug/ socket terminals along with RJ45 type connectors for the Ethernet LAN ports.



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# **SPECIFICATION**

# **Power supplies**

12VDC IS Power Supply Input PoExTM (Power over IS Ethernet) Typically 12V @ 350mA Ui = 15.4V 9492-PS-PLUS recommended

#### Ethernet

Intrinsically Safe 10/100/1000Base-T

### Connector

RJ45 (x6)

### **Cable Length**

Up to 100m Cat5e

#### **PoEx**

Power Source

# **SAFETY**

### **Location of Unit**

Zone 1, IIBT4 hazardous area (9476-ETG) Zone 1, IICT4 hazardous area (9476-ET)

## **Certification Code**

Ex ia IIBT4 Ga (9476-ETG versions) Ex ia IICT4 Ga (9476-ET) [Ex ia Da] IIICT135°C (non-mining) Ex ia I Ma (M1 mining) Ta =-40°C to +70°C

#### **Certificate numbers**

CML 19ATEX2414X IECEx CML 19.0150X IECEx (QLD pending)

See certificates for further information

# **ENVIRONMENTAL**

Operating Temperature -40°C...+70°C

Storage Temperature

-40°C...+70°C

# Humidity

0...95% RH, non-condensing

## **Ingress Protection**

Select enclosure to suit application, see certificates for information

# **MECHANICAL**

| Width    | 40mm     |
|----------|----------|
| Height   | 160mm    |
| Depth    | 140mm    |
| Weight   | 1500g    |
| Mounting | Din Rail |

# **LED INDICATORS**

|                   | OFF                        | FLASH                           | ON                             |
|-------------------|----------------------------|---------------------------------|--------------------------------|
| PWR (green)       | Power Fail                 | N/A                             | Power OK                       |
| WDG (red/green)   | Fault                      | Green- Healthy<br>(10Hz)        | Fault                          |
| STAT (red/green)  | N/A                        | Green – Identify<br>module mode | Red (fault)<br>Green (healthy) |
| RJ45 ACT (yellow) | Ethernet link disconnected | Ethernet link activity          | Ethernet link connected        |
| RJ45 1000 (green) | 10/100Mbps                 | N/A                             | 1000Mbps                       |

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### **DATA & POWER TERMINALS**

# Power & External LEDs (CON1)

| Pin | Function       | Pin | Function        |  |
|-----|----------------|-----|-----------------|--|
| 1   | Power In +12V  | 2   | Power In 0V     |  |
| 3   | LAN3 PoEx +12V | 4   | LAN3 PoEx 0V    |  |
| 5   | LAN4 PoEx +12V | 6   | LAN4 PoEx 0V    |  |
| 7   | LAN5 PoEx +12V | 8   | LAN5 PoEx 0V    |  |
| 9   | LAN6 PoEx +12V | 10  | 10 LAN6 PoEx 0V |  |
| 11  | OV             | 12  | <b>12</b> 0V    |  |
| 13  | LAN1 LED       | 14  | LAN2 LED        |  |
| 15  | LAN3 LED       | 16  | LAN4 LED        |  |
| 17  | LAN5 LED       | 18  | LAN6 LED        |  |

<sup>-</sup> LEDS wire between LED terminal and 0V (no resistor required)

# LAN (RJ45) 10/100/1000 BASE-T Ethernet

| Pin | 10/100 Function | Gigabit Function |
|-----|-----------------|------------------|
| 1   | Tx +            | BI_DA+           |
| 2   | Tx-             | BI_DA-           |
| 3   | Rx +            | BI_DB+           |
| 4   | PoEx +12V*      | BI_DC+           |
| 5   | PoEx +12V*      | BI_DC-           |
| 6   | Rx-             | BI_DB-           |
| 7   | PoEx 0V*        | BI_DD+           |
| 8   | PoEx 0V*        | BI_DD-           |

\*Note - PoEx only on LAN3-6 ports when 10/100

PoEx not available on Gigabit ports

# **ORDERING INFORMATION**

| Part Number | Description  | Comments      |
|-------------|--|---------------|
| 9476-ETG    | 6 Port Gigabit Ethernet Switch                                 | Standard      |
| 9476-ET4G   | 4+2 Port Gigabit Ethernet Switch (4x Gigabit + 2x 10/100 PoEx) | Standard      |
| 9476-ET     | 6 Port Ethernet Switch (6x 10/100 PoEx)                        | Standard      |
| 9476-ET2G   | 2+4 Port Gigabit Ethernet Switch (2x Gigabit + 4x 10/100 PoEx) | Special Order |
| 9476-ET3G   | 3+3 Port Gigabit Ethernet Switch (3x Gigabit + 3x 10/100 PoEx) | Special Order |

Note: Special order items may incur a minimum order quantity



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