Technical data
MTL industrial networks

December 2015
EPS MTL ExLAN rev 1

CROUSE-HINDS
SERIES

# MTL ExLAN

## Intrinsically Safe 10/100 Ethernet Interface

- **Intrinsically Safe ATEX / IECEx Component Certification**
- **Ex ia IIC T4 Ga; Ex ia IIIC T135°C Da (non-mining), Ex ia I Ma (M1 mining). Ta = -40ºC to +70ºC**
- **PoEx™ Compatible (Power over IS Ethernet) 10/100 BASE-T IS Ethernet Interface for standard Cat5e/Cat6 Ethernet Cabling Systems**
- **Voltage Clamping (Duplicate OVP crowbar circuitry) clamps users 5V or 3V3 supply rail to 5.88V maximum**
- **ExLAN interface connects between the Ethernet port Magnetic (transformer) and RJ45 (or other) connector**
- **Magnetic can be omitted if not required and ExLAN module then connects directly to PHY**



**The MTL ExLAN is an Intrinsically Safe (IS) 10/100Mbps Ethernet Interface incorporating CSLs patented technology.**

This module is intended to simplify OEM product design and certification. It ensures full IS compatibility of interconnected devices including the current range of 9400 IS Ethernet modules and future product ranges.

As well as providing the essential network LAN interface, the module also voltage clamps the equipment's main supply rail (typically 5V or 3V3) together these ensure the Ethernet signals generated are limited to low Intrinsically Safe levels.

It is fully compatible with PoEx™ (12VDC Power over Ethernet for Hazardous Areas).

Dimensions : 40 x 40 x 8 mm. Connection to users PCB are via 2.54mm (0.1") pitch headers

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# MTL ExLAN IS 10/100 ethernet interface
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## MECHANICAL DIMENSIONS (mm)

Dimensions : 40 x 40 x 8 mm. Connection to users PCB are via 2.54mm (0.1") pitch headers (0.7mm pin)
Recommended PCB pad hole size 1mm
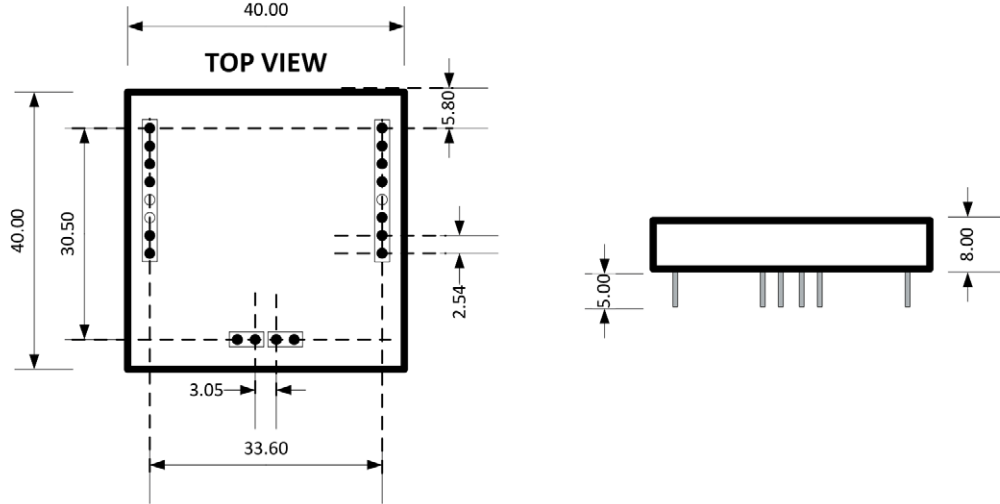


**Pin out table**

| Pin # | Symbol | Functional Description |
|-------|--------|------------------------|
| PL1-1 | +Vi | Power Supply +'ve rail input |
| PL1-2 | 0V | Power Supply 0V rail input |
| PL2-1 | +Vo | Power Supply +'ve rail output |
| PL2-2 | 0V | Power Supply 0V rail output |
| PL3-1 | TXP | LAN TXP (from PHY) |
| PL3-2 | TXN | LAN TXN (from PHY) |
| PL3-3 | RXP | LAN RXP (from PHY) |
| PL3-4 | RXN | LAN RXN (from PHY) |
| PL3-5 | | (no pin) |
| PL3-6 | | (no pin) |
| PL3-7 | PoEx+ | LAN PoEx+ (supply output) |
| PL3-8 | PoEx- | LAN PoEx - (supply output) |
| PL4-1 | TX+ | LAN TX+ (to RJ45) |
| PL4-2 | TX- | LAN TX- (to RJ45) |
| PL4-3 | RX+ | LAN RX+ (to RJ45) |
| PL4-4 | RX- | LAN RX- (to RJ45) |
| PL4-5 | 0V | LAN SHEILD (to RJ45) |
| PL4-6 | | (no pin) |
| PL4-7 | PoEx+ | LAN PoEx+ (to RJ45 pin4+5) |
| PL4-8 | PoEx- | LAN PoEx- (to RJ45 pin7+8) |
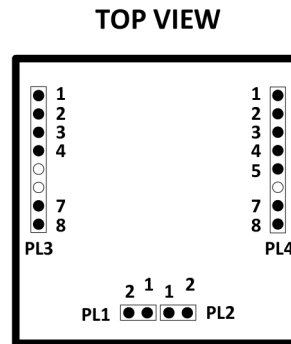


PL3-5, PL3-6 and PL4-6
○ = no pin (keyway)

**NOTE: Refer to certificate CML 15ATEX2017U / IECEx CML 15.0009U for electrical parameters and Special Conditions of Safe Use. Reference design available.**

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

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