

Ethernet/IP - CIP Safety communication module



The **proNet** module allows the features of amGardpro to become distributed IO (input-output) on an Ethernet/IP network; safety information is exchanged using the CIP Safety extensions. The unit can connect the following modules to an Ethernet/IP network; see individual datasheets for further details of the modules:

- A proLok safety switch with a vast array of options using modular adaptors, heads and actuators in the amGardpro range.
- An e-stop and an external safety switch.
- Up to eight lamps and pushbuttons from the proOption Pod range.

All the safety signals are communicated via CIP Safety, while standard IO via Ethernet/IP. An integrated network switch facilitates 'daisy-chain' bus topologies with no additional hardware.







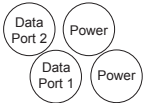
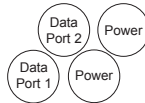
Variety of connection options: PF07, PF09, PF10, PF11

IP-address settable via web interface, DHCP or dip switches

Device diagnostic information available via on board LEDs

Diagnostic functions available via web interface:

- Supply voltage
- Ethernet connection statistics

| PF07 | PF09 | PF10 | PF11 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
|  |  |  |  |

proNet Part Number Options

| Part Number | Description |
|-------------|------------------------------------------------------------------|
| N5xxxxN* | proNet Ethernet/IP to suit proLok module. |
| PF07 | 3 QD set – 1 Male power, 2 EIP |
| PF09 | 4 QD set – 1 Male power, 2 EIP, 1 External safety switch |
| PF10 | 4 QD set – 1 Male power, 1 Female power, 2 EIP |
| PF11 | 4 QD set – 1 Male power, 1 Female power, 2 EIP (7/8" connectors) |

*see amGardpro Option Pod datasheet for button options

proNet Technical Specification

| | |
|---------------------|----------------------------------------|
| Housing Materials | Zinc Alloy to BS1004A |
| Paint Finishes | Gloss Powder Coat on Passivated bodies |
| Ingress Protection | IP67 (IP65 with buttons) |
| Ambient Temperature | -5°C to + 40°C (23°F to 140°F) |
| Supply Voltage | 24V DC +/- 10% |
| Supply Current | ≤750mA |

Functional Safety

| | |
|------------------------------|------------------------------|
| Category / Performance Level | Cat 4 / PLe |
| MTTFd | MTTFd > 100y PFH=2.44 E-9 |
| DC avg | DC = High |

proNet - Network Safety

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| Pin Out | | Male Power M12 | Female Power M12 | Male Power 7/8" | Female Power 7/8" | Data | External Safety Switch |
|------------------------|--------------|------------------------|------------------|------------------------|-------------------|---------------------------------|------------------------|
| | | | | | | | |
| | | M12 - 5 Pin | | 7/8" - 5 Pin | | M12 FEMALE - 4 Pin 'D' Coded | M12 FEMALE - 5 Pin |
| 1 | +24V Supply* | 1 | 0V** | 1 | 0V** | 1 | TX+ |
| 2 | 0V** | 2 | 0V** | 2 | 0V** | 2 | RX+ |
| 3 | 0V** | 3 | Case (Earth) | 3 | Case (Earth) | 3 | TX- |
| 4 | +24V Supply* | 4 | +24V Supply* | 4 | +24V Supply* | 4 | RX- |
| 5 | Case (Earth) | 5 | +24V Supply* | 5 | +24V Supply* | 5 | Case (Earth) |
| *Internally connected | | *Internally connected | | *Internally connected | | | |
| **Internally connected | | **Internally connected | | **Internally connected | | | |

Dimensional Drawing - PF10 Shown

