



Description

The Model T9040NLR 40-channel Multi-Function Interface is a unit that interfaces with up to 16 IED 540S Ambient Sensors, 16 logic or voltage signals, and 8 relays. This device is designed to mount in a 19-inch equipment rack/cabinet, taking up only 1 rack unit (RU), or 1.75" of vertical space. It is a low power device which utilizes natural cooling, so no additional vertical space is required in the rack for cooling. The mainframe has removable rack mounting ears, which may alternately be placed near the bottom of the mainframe for ease in mounting this unit on a wall, such as in a telephone closet, or on the back for rear rail mounting reinforcement.

The interface has connections for up to up to 16 IED 540S Ambient Sensors. It supplies the 27 Volts of DC power required by the sensors. The collector samples the readings from all sensors several times each second and sends the readings to a Titan Series mainframe to perform the Ambient Analysis calculations and adjusts the outputs accordingly.

The interface has connections for up to up to 16 logic or voltage inputs. The 16 inputs are configured in the system software to trigger actions or report faults when an input is activated or deactivated.

The inputs are designed to handle up to 24V for logic signaling and can measure input voltages in the 0-10V DC range. Inputs are software selectable to sense logic states or voltage values. When set to logic, any voltage below a pre-determined threshold is reported as a logic zero and any voltage above as a logic one. It also has software selectable pull up/down resistors on the inputs to allow it to handle different logic type systems such as voltage signaling, current sink and open-collector signalling. This setting is configurable for each bank of 8 inputs.

The unit includes connections for up to 8 Form C relay outputs. Relays are configured in software to trigger external devices based on actions defined in the system.

The standard method of powering the collectors is through Power over Ethernet (PoE) from an IEEE 802.3af compatible Ethernet switch. They can also be powered using a Mid-Span power supply or an external 48 VDC local power supply, both purchased separately.

Specifications

Electrical, Analog

| | |
|---------------------|--------|
| Power Supply | |
| Supply Voltage..... | 48 VDC |
| Power | 10 W |

Connectors

| | |
|---------------------------------------|-------------------------------|
| 540S Sensors (16) | 3-pin Phoenix, 3.81mm spacing |
| I/O Points (8, 2 per connector) | 3-pin Phoenix, 3.81mm spacing |
| Relays (8) | 3-pin Phoenix, 3.81mm spacing |
| Ethernet..... | Modular 8 (RJ-45) |
| Auxiliary (48V) Power..... | 3-pin Phoenix, 3.81mm spacing |
| CAN bus (2) | 6-pin Phoenix, 3.81mm spacing |

Controls and Indicators

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|---|--------------------------|
| Ethernet connection and data LEDs | 2 |
| Status LEDs | 3 (Power, System, Fault) |

Mechanical

| | |
|------------------------------------|-------------------------|
| Size, overall | |
| Width, with ears | (48.3 cm) 19" |
| Height..... | (4.45 cm) 1.75" |
| Depth | (43.2 cm) 17" |
| Mounting Depth (rack depth) | (44.2 cm) 17.4" |
| Weight | (3.2 kg) 7 lb. |
| Mounting Ear Location Options..... | 3 (front, rear, bottom) |

Environmental

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|-----------------------------------|--------------------------------------|
| Operating Temperature Range | (+32 °F to +122 °F) 0 °C to +50 °C |
| Storage Temperature Range | (-40 °F to +158 °F) -40 °C to +70 °C |

Optional Accessories

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|------------|--------------------------------------|
| PS012..... | 48VDC power supply, 36W, 110/220 VAC |
|------------|--------------------------------------|