PHAROS SWITCH

PHAROS SWITCH INSTALLATION

The four-port Pharos Switch is designed to be permanently installed in a central control room/cupboard or DIN consumer unit for remote deployment.

The unit is 100% solid state and has been qualified to operate in a dry environment:

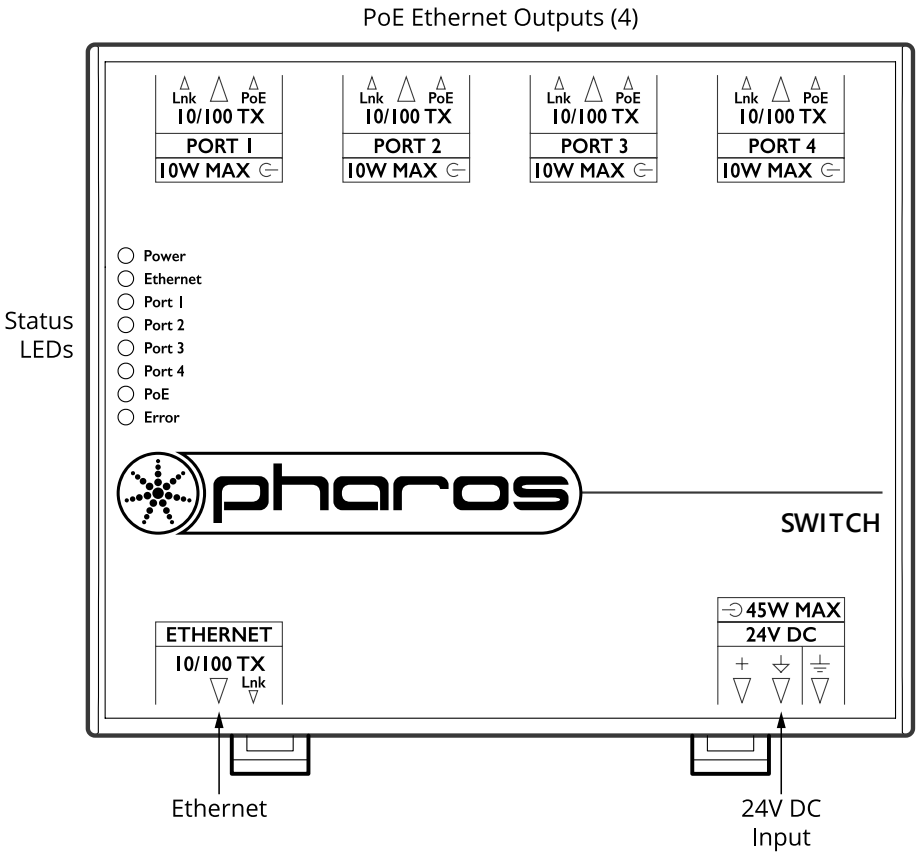
- Temperature range 0°C to 50°C (32°F to 122°F)
- Humidity 10-90% relative, non-condensing
- Ingress IP40

Sealed IP65 rated consumer units are available for outdoor use, please consult your Pharos distributor or representative.

NOTE: This equipment is not suitable for use in locations where children are likely to be present.

PHAROS SWITCH LAYOUT

The following drawing illustrates the layout of the switch, refer to the following sections for details:



© 2004-2026 Pharos Architectural Controls Limited.
All rights reserved. Subject to change without notice.

POWER SUPPLY

- DC power (24V)

  A limited power source approved to UL60950-1 2 Edition, CAN/CSA C22.2 No. 60950nd1.07 2 Edition MUST be used, with an output voltage of 24V DC.

  Such a power supply can be connected directly to Pharos Switch using the DC Input connector. The pins on this connector are marked:

  \+ Positive input (24V DC)

  ⏚ Signal ground (0V)

  ⏚ Earth

  The power supply should be connected to the Positive and Signal ground inputs, ensuring the polarity is correct.

POWER SUPPLY CHOICE & PHAROS SWITCH LOADING

The power supply must provide 24V, with an appropriate current and power rating for the devices.

The Pharos Switch is capable of powering up to four IEEE 802.3af Class 1, 2 and 0 (up to 10W) PoE devices. The power supply required can be calculated using the table below:

Example Pharos Devices	Maximum PSU Power Consumption
5" touchscreen	7W
DIN-rail PoE lighting controller	5W

For example, to power a controller and three touchscreens, the minimum required power would be:

```
5W + (3 × 7W) = 26W
```

Pharos Switch ports include overcurrent protection for the detected PoE class.

More than one Pharos Switch may be powered by a single power supply provided its rating is increased accordingly.

GROUNDING

A dedicated earth terminal is provided which should be connected to a suitable earth.

STATUS LEDS

The red LEDs on the top of the Pharos Switch indicate the unit's status:

Power:	Illuminates when power is applied.
Ethernet:	Illuminates when the link has been established and toggles off to indicate data.
Port 1-4:	Illuminates when the link has been established and toggles off to indicate data.
PoE:	Indicates any activity on PoE Ports.
Error:	Illuminates when error is detected.

PORTS

- Ethernet and PoE Ports

  The Pharos Switch includes 1 standard 10/100TX port for communication with non-PoE devices, and 4 PoE capable 10/100TX ports to provide power and communicaiton to PoE powered devices. The LEDs on the RJ45 port itself are useful for debugging the Ethernet installation:

  - Green (solid for link, flash for data).
  - Yellow (solid for PoE, slow flash for PoE detect error, fast flash for current error).

WARRANTY

Pharos Architectural Controls Limited (Pharos) products are warranted for a period of five (5) years from the original date of purchase against defective materials and workmanship.

This warranty is subject to the terms, conditions and exclusions available at www.pharoscontrols.com/legal