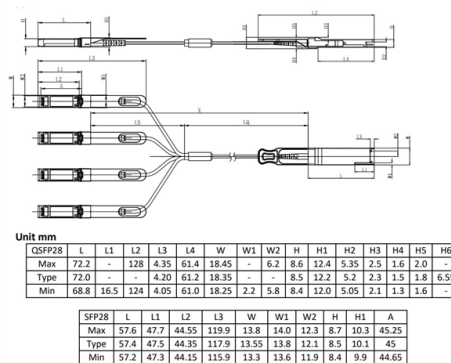


How to power an industrial switch



Article Overview

Industrial switches can be powered using AC or DC power supplies, with proper wiring, grounding, and surge protection to ensure safe and reliable operation.

Determine the Power Type

Industrial switches may accept AC or DC input, depending on the model. Check the switch specifications or data sheet to confirm the required voltage and current ratings. Some switches, like the Cisco IE 4010 series, ship with field-replaceable AC or DC power-supply modules that are hot-swappable in non-hazardous environments ().

Wiring the Power Supply

- Turn off the power before starting any wiring to prevent electric shock ().
- Identify the positive (live/hot) and negative (neutral) terminals for DC, or line and neutral for AC.
- Use red wires for positive/live and black wires for negative/neutral connections ().
- Connect the positive/live wire from the power supply to the corresponding terminal on the switch.
- Connect the negative/neutral wire from the power supply to the switch's terminal.
- For illuminated switches, the LED module may draw power from the same source or a dedicated low-voltage supply; ensure correct pin assignments for power, load, ground, and LED leads ().

Grounding and Surge Protection

- Connect the ground wire (green or bare copper) from the switch to a proper ground...

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