



## Technical Specifications

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## Technical Specifications

The most current technical specifications for the IE 3x00 series switches can be found in the data sheets:

- [Cisco Catalyst IE3200 Rugged Series Data Sheet](#)
- [Cisco Catalyst IE3300 Rugged Series Data Sheet](#)
- [Cisco Catalyst IE3400 Rugged Series Data Sheet](#)

Additional specifications and details not in the data sheets are in this section.

## Enclosure Specifications

*Table 1: Enclosure specifications for the Cisco IE 3X00 Switches*

	<b>Industrial Automation and Hazardous Locations</b>	<b>Substation</b>	<b>Traffic Signal</b>
Enclosure types	Sealed enclosures For example: NEMA4, NEMA4X, NEMA12, NEMA13, IP54, and IP66.	Vented enclosures For example: NEMA1, IP20, and IP21.	Fan or blower-equipped enclosures For example: NEMA TS-2. <b>Note:</b> The minimum airflow is 150 lfm <sup>1</sup> .

<sup>1</sup> lfm = linear feet per minute.

## Current and Input Voltage Ratings

Table 2: Current and Input Voltage Rating

Model	Voltage Range	@Max Amps	PoE / PoE (+) budget
IE-3200-8T2S	12-48Vdc	2.2A	N/A
IE-3200-8P2S	12-54Vdc	5.5A	240W
IE-3300-8T2S	12-48Vdc	4.0A	N/A
IE-3300-8T2X	12-48Vdc	4.0A	N/A
IE-3300-8U2X	12-54Vdc	10.6A	480W
IE-3300-8P2S	12-54Vdc	10.6A	240W (base), 360W (with module)
IE-3400-8T2S	12-48Vdc	4.4A	N/A
IE-3400-8P2S	12-54Vdc	10.7A	240W (base), 480W (with expansion module)

## Alarm Ratings

Table 3: Cisco IE3x00 Alarm Ratings

Alarm Ratings	Specification
Alarm input electrical specification	<p>Senses an external dry contact. The open circuit voltage between any alarm input (1 to 4) and alarm input common is 3.3 VDC. The loop current is 3 mA max per input.</p> <p>The alarm input's low-level input voltage threshold is 0.4V.</p> <p>Do not apply external power to the alarm input.</p>
Alarm output electrical specification	1.0 A @ 24 VDC or 0.5 A @ 48 VDC

## Installation Guidelines for Utility, Railway, and Marine Environments

Follow the guidelines in this section when installing the switch in utility, railway, and marine environments,

- Use shielded Ethernet cables to comply with the EMC requirements for power utility, power stations, railways, and marine environments. These installations refer to DNVGL CG-0339, IACS UR E10, IEC 60945.

- Use industrial grade SFP modules rated for -40C to +85C operation.
- For marine installations, you must install the product inside a metal enclosure, preferably IP54 or better.
- Use DNVGL "Type Approved" power supply for marine installations that use DNVGL CG-0339 guidelines.  
Cisco IE3x00 series switches require 54V (typical) for PoE operation. Refer to the [Current and Input Voltage Ratings, on page 2](#) section for more details on the power input.
- IE3x00 products are approved for the marine installation category “All locations except bridge and open deck.”
- The IE3200 series complies with specific requirements of EN50155, exclusions clauses apply.

