



Technical Specifications

The most current technical specifications for the Cisco Catalyst IE3100 Rugged Series Switches can be found in the Cisco Catalyst IE3100 Rugged Series Switch Data Sheet. You can find other specs and detail that are not in the Data Sheet in this section.

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Physical Specifications

The following table lists the physical specifications for Cisco Catalyst IE3100 Rugged Series Switches.

Table 1: Physical Specifications

Switch	Weight	Dimensions (H x W x D)
IE-3100-4T2S-E	1.6 lb (.73 kg)	5.00 x 2.55 x 4.37 in. (12.70 x 6.48 x 11.10 cm)
IE-3100-8T2C-E	1.9 lb (.86 kg)	5.00 x 3.00 x 4.37 in (12.70 x 7.62 x 11.10 cm)
IE-3105-8T2C-E	2.3 lb (1.04 kg)	5.00 x 3.00 x 5.12 in (12.70 x 7.62 x 13.00 cm)
IE-3100-18T2C-E	2.8 lb (1.27 kg)	5.00 x 4.30 x 5.12 in (12.70 x 10.92 x 13.00 cm)
IE-3105-18T2C-E	2.8 lb (1.27 kg)	5.00 x 4.30 x 5.12 in (12.70 x 10.92 x 13.00 cm)
IE-3100-8T4S-E	1.9 lb (.86 kg)	5.00 x 3.00 x 4.37 in (12.70 x 7.62 x 11.10 cm)



Note The depth of the switch is measured from the faceplate to the front of the DIN rail.

Environmental Ranges

The following table displays environmental ranges for Cisco Catalyst IE3100 Rugged Series Switches.

Table 2: Environmental Ranges

Measure	Range
Operating temperature	<ul style="list-style-type: none"> Blower-equipped cabinet: -40°C to $+75^{\circ}\text{C}$ (-40°F to 167°F) Vented cabinet: -40°C to $+70^{\circ}\text{C}$ (-40°F to 158°F) Sealed cabinet: -40°C to $+60^{\circ}\text{C}$ (-40°F to 140°F)
Storage temperature	-40°C to $+85^{\circ}\text{C}$ (-40°F to 185°F)
Relative humidity	5 percent to 95 percent noncondensing
Operating altitude	<ul style="list-style-type: none"> Up to 15,000 feet (4572 m) with no temperature derating Up to 40,000 feet (12,192 m) with temperature derated at 25°C (77°F)
Storage altitude	Up to 40,000 feet (12,192 m)
Thermal spacing	1.0 in (25.4 mm) clearance top, sides, and bottom
Operational shock	50G at 11ms, half sine and 200G at 2.11ms, half sine
Nonoperational shock	65 to 80G at 9ms, trapezoidal

Alarm Ratings

Specification	Description
Alarm input electrical specification	<p>Senses an external dry contact. The open circuit voltage between any alarm input (1 to 2) and alarm input common is 3.3 VDC. The loop current is 3 mA max per input.</p> <p>Do not apply external power to the alarm input.</p>
Alarm output electrical specification	30VDC @ 1A, 60VDC @ 0.5A (Resistive load only).

Power Input Ratings

Switch Model	Maximum Current
IE-3100-4T2S-E	12VDC–48VDC, 1.6 A
IE-3100-8T2C-E	12VDC–48VDC, 2.0 A
IE-3100-8T4S-E	12VDC–48VDC, 2.1 A
IE-3100-18T2C-E	12VDC–48VDC, 4.2 A
IE-3105-8T2C-E	12VDC–48VDC, 3.2 A
IE-3105-18T2C-E	12VDC–48VDC, 4.2 A

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 that are rated for -40C to +85C operation.
- For marine installations, you must install the product inside a metal enclosure, preferably IP54 or better.

