

ITT Cannon Trident Multiway Rack & Panel Connectors



RECTANGULAR CONNECTORS RATED TO IP40

ITT Cannon Trident Multiway connectors are a family of cost-effective rectangular connectors tested to MIL-STD-202 and IEC 512. Trident Multiway Rack & Panel connectors have earned an International Ingress Protection (IP) rating of IP40, meaning they are completely sealed against dust and other solid objects and temporarily submersible up to 1m. The Multiway range has six contact cavity arrangements available and offers an extremely reliable connector system, in which any Trident signal or coaxial contacts can be used. All Multiway Rack & Panel connectors are RoHS-compliant and recognized under the component program of CSA. For full details on the ITT Cannon Trident Multiway Rack & Panel Connector series, please see the product specifications below.

APPLICATIONS

- Inflight entertainment systems (IFE)
- Railway applications
- Test and measurement equipment

FEATURES

- Fully tested to MIL-STD-202 and now IEC 512
- 14- to 75-contact layouts with wide range of accessories and mounting hardware
- Polarizing between connectors available, by contact position, use of shrouds, or additional guide pin and socket sets
- Reliable and robust series of rack and panel connectors.
- RoHS-compliant and recognized under the component program of CSA

MATERIALS & FINISHES

Shell:	Anodized aluminum, zinc alloy, thermoplastic
Shell plating:	Zinc alloy gray painted
Insulator:	Glass filled phenolic
Contact:	Copper-alloy
Contact plating:	Tin, gold, silver
Contact style / termination:	Crimp, solder

ELECTRICAL DATA

Operating voltage:	250 V ac
Current rating:	16 A
Number of signal contacts (min/max)	14 to 75
Gauge wire size:	Signal: AWG 26-14 (0.08 - 2.5 mm ²)

MECHANICAL DATA

Industry / MIL-SPEC #:	IEC 512. MIL-STD-202
Application / Market:	Industrial, Transportation
Shape:	Rectangular
Shell style:	Plug and Receptacle
Durability:	500 Mating Cycles
Contact style / Termination:	Crimp, Solder

TEST DATA

TEST DESCRIPTION	IEC TEST	MILITARY STANDARD	TEST METHOD
Test Voltage	512-2 Test 4A	MIL-STD-202	301
Insulation Resistance	512-2 Test 3a	MIL-STD-202	302
Vibration	512-4 Test 6d	MIL-STD-202	204, Condition A
Shock	512-4 Test 6c	MIL-STD-202	213
Humidity	512-6 Test 11c	MIL-STD-202	103, Condition C
Corrosion (Salt Spray)	512-6 Test 11f	MIL-STD-202	101, Condition B
Dry Heat	512-6 Test 11i	MIL-STD-202	108A, Condition D

PERFORMANCE SPECIFICATIONS

Temperature Range	-55°C to +125°C (-67°F to +257°F) Plastic Hood assemblies limited to 105°C to (221°F)
Test Voltage	200 V ac rms for 60 seconds
Insulation Resistance	5000MΩ min. at 500 V DC
Durability*	Up to 500 Mating Cycles
Flammability	UL 94 V-0 (Insulators), UL 94 V-1 (Plastic Hoods)
Rated Current	Dependent on choice of contact and application (usually limited by cable bundle factor)

*Up to 500 cycles for machined contacts; up to 200 cycles for stamped contacts