

# Product Specifications

## Category 6 MD-Series Unscreened Patch Panels



### KEY FEATURES

- Exceeds ANSI/TIA-568-C.2 component performance specifications
- Supports TIA-568-C.2 Category 6 100 meter channel performance
- Built-in PCB-based jack modules ensure Category 6 parameters
- Easy-to-read T568A/B wiring scheme color-coded label
- Port designation features along each port for quick identification
- Integrated for optional snap-in cable management bar
- Cold-rolled steel construction for maximum strength and durability

The Signamax Category 6 MD-Series Unscreened Patch Panels were designed to feature a fully enclosed, modular design, which provides flexibility and protection of printed circuitry during termination. The sixfold 110-type connector blocks significantly improve connector-to-connector interference isolation and electrical transition between socket contacts and IDC's. For easy circuit identification, each port designation features a labeling area and a reference number.

The MD-series panels are available in 12, 24, or 48 port versions featuring a rolled-edge steel construction eliminating panel flex during fixed termination. The contact design provides enhanced plug-to-jack connection integrity and protects against damage caused by insertion of 4 or 6 position plugs. Termination can be done using a standard single-position 110 termination tool, and the ports are all rated for a minimum of 750 plug insertions providing for the highest level of system reliability.

### ORDERING INFORMATION

PART NO.	DESCRIPTION
12458MD-C6C	12-Port Category 6 MD-Series Patch Panel, 1.75" H
24458MD-C6C	24-Port Category 6 MD-Series Patch Panel, 1.75" H
48458MD-C6C	48-Port Category 6 MD-Series Patch Panel, 3.50" H

Optional cable management bar sold separately.

## SPECIFICATIONS

### TRANSMISSION PERFORMANCE

ANSI/TIA-568-C.2: exceeds category 6 (1-250 MHz) component specifications

### TRANSMISSION MEDIA

Unscreened twisted pair (U/UTP)

### JACK TYPE

8p8c (8-position, 8-contact) "RJ45" type

### WIRING SCHEME (See Figure 1)

ANSI/TIA-568-C.2: T568A & T568B

ISO/IEC 11801 2nd Ed.: 8-position pin/pair assignment (1-2/3-6/4-5/7-8)

### WIRE GAUGE

22 to 24 AWG (0.64 to 0.51 mm)

### ELECTRICAL

**Insulation Resistance:** Min 500 MOhm @ 100 V<sub>dc</sub>

**Dielectric Withstanding Voltage:**

1,000 V<sub>dc/ac</sub> peak contact-to-contact @ 60 Hz for 1 min

**Spring Wire Contact Resistance:** Max 20 mOhm

**IDC Contact Resistance:** Max 2.5 mOhm

**Current Rating:** See Figure 2

### CONSTRUCTION

**Panel:** Steel with corrosive resistant black finish

**Connector:**

**Housing:** High-impact thermoplastic, UL94V-0 fire-retardant

**Spring Wire:** Phosphor bronze alloy plated with min 50 µin of gold over 70 µin to 100 µin of nickel plating

**IDC:** 110 type, phosphor bronze alloy with 100-µin 100% tin alloy

### MECHANICAL

**Total Contact Force:** Min 800 g for 8 wire leads with FCC compliant 8p8c plug

**Retention:** 50 N (11 lbf) for 60 ± 5 s

**Mating Cycle Life:** Min 750 cycles with FCC compliant 8p8c plug

### MOUNTING DIMENSIONS:

**Panel:** 19-in rack mountable

**Depth:**

Management Bar Installed: 6.0" (153 mm)

Management Bar Uninstalled: 1.5" (38 mm)

**Height:**

12458-C6C: 1 RMU (1.75" (44.45 mm))

24458-C6C: 1 RMU (1.75" (44.45 mm))

48458-C6C: 2 RMU (3.50" (88.90 mm))

### ENVIRONMENTAL CONDITIONS

**Operating Temperature:** 14 °F to 140 °F (-10 °C to 60 °C)

**Storage Temperature:** -40 °F to 158 °F (-40 °C to 70 °C)

**Operating RH:** 93% Max (non-condensing)

### COMPLIANCE

ANSI/TIA-568-C.2, IEEE 802.3 ab, FCC Part 68 Subpart F, UL 94V-0, UL 1863, IEC 60603-7

### APPLICATIONS

X.21, V.11, S0, ISDN, CSMA/CD 10BASE-T, 100BASE-TX, 100BASE-T4, 100BASE-T2, 1000BASE-T, 10GBASE-T, TR 4/16/100, 100BASE-VG, ATM LAN 25/51/155, TP-PMD

### WARRANTY

5 - Year Limited Component

Figure 1: Wiring Schemes

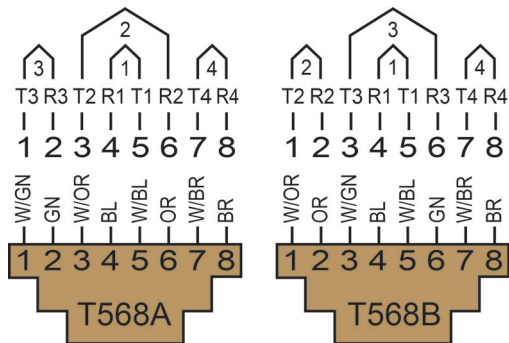


Figure 2: Current Rating

