

# Product Specifications

## Category 6A MD-Series Unscreened Patch Panels



### KEY FEATURES

- Exceeds ANSI/TIA-568-C.2 transmission performance specifications
- Meets IEEE 802.3an 10 Gigabit Ethernet transmission requirements
- Built-in PCB-based jack modules ensure Category 6A parameters
- 110-type connectors' orientation guarantees excellent alien cross-talk parameters
- Easy-to-read T568A/B wiring scheme color-coded label
- Port designation features along each port for quick identification
- Removable rear cable management bar
- Cold-rolled steel construction for maximum strength and durability

The Signamax Category 6A MD-Series Unscreened Patch Panels were designed to eliminate cross talk. The sixfold 110- type connector blocks are oriented to increase spacing allowing significant improvement in connector-to-connector interference isolation. A modular PCB design provides an effective electrical transition between socket contacts and 110-type IDC's. For easy circuit identification, each port designation features a labeling area with a hinged window cover and a reference number.

The MD-series panels are available in 24- and 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
24458MD-C6AC	24-Port Category 6A MD-Series Patch Panel, 1.75" H
48458MD-C6AC	48-Port Category 6A MD-Series Patch Panel, 3.50" H

## SPECIFICATIONS

### TRANSMISSION PERFORMANCE

ANSI/TIA-568-C.2: meets or exceeds category 6A (1-500 MHz) component specifications

### TRANSMISSION MEDIA

Unscreened twisted pair (U/UTP)

### JACK TYPE

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

### 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 Vdc

Dielectric Withstanding Voltage:

1,000 Vdc/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

Cable management barNickel-plated steel

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: 3.5" (75 mm)

Management Bar Uninstalled: 1.5" (38 mm)

Height:

24458MD-C6AC: 1 RMU (1.75" (44.45 mm))

48458MD-C6AC: 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

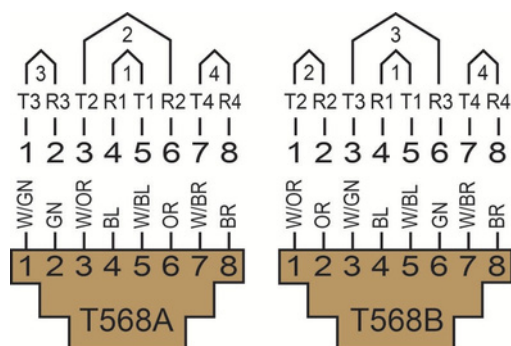


Figure 2: Current Rating

