

# **Product**

# Specifications

# Category 6A MT-Series Unscreened Patch Panels



## **KEY FEATURES**

- Exceeds ANSI/TIA-568-C.2 component performance specifications
- Meets IEEE 802.3an 10 Gigabit Ethernet transmission requirements
- Eliminates alien crosstalk with solid-metal cable-retention cap on connector modules
- Removable rear cable management bar
- Improved wire retention and ease of termination with rear 110 type contacts
- Slim profile for the highest density applications
- Cold-rolled steel construction for maximum strength and durability
- Easy-to-read T568A/B wiring scheme color-coded label

The Signamax Category 6A MT-Series Unscreened Patch Panels are designed to offer a complete panel and jack option. The MT- series includes the option of a 24, 48, or 72 port panel, black snap in keystone jacks, and a cable management bar. This unique design allows easy termination and greater flexibility for future adds, moves or changes, giving installers the perfect cost effective solution for Category 6A applications.

The patch panels rolled-edge steel construction eliminates panel flex, and in leu of fixed termination, a standard single-position 110 termination tool or a specialized Signamax multi-pair tool can be used. For easy circuit identification, each port designation features a labeling area with a reference number. The keystone jacks are rated for a minimum of 750 plug insertions providing for the highest level of system reliability.

## ORDERING INFORMATION

PART NO.	DESCRIPTION
24458-C6A	24-Port Category 6A MT-Series Patch Panel 1.75" H
48458-C6A	48-Port Category 6A MT-Series Patch Panel, 3.50" H
72458-C6A	72-Port Category 6A MT-Series Patch Panel, 3.50" H

Panels are supplied as a kit, which includes the panel, black MT-Series unscreened jacks per port count, a cable management bar per RMU, and cable ties.

For panels with other keystone jack color options contact Customer Service.

# **SPECIFICATIONS**

TRANSMISSION PERFORMANCE

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

TRANSMISSION MEDIA

Unscreened twisted pair (U/UTP)

**JACK TYPF** 

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 Vdc

Dielectric Withstanding Voltage:

1,000 Vdc/appeak 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:

Front: Steel with corrosive resistant black finish

Rear: Steel

Cable management bar:Thermoplastic with steel brackets

Jack:

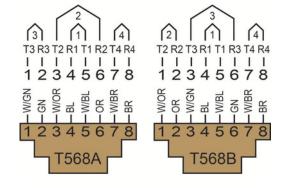
Housing: High-impact thermoplastic, UL94V-0 fire-retardant

Contacts: 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– $\mu$ in 100% tin alloy

# Figure 1: Wiring Schemes



# **MECHANICAL**

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

Retention: 50 N (11 lbf) for  $60 \pm 5$  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)

Heiaht:

24458-C6A: 1 RMU (1.75" (44.45 mm)) 48458-C6A: 2 RMU (3.50" (88.90 mm))

72458-C6A: 2 RMU (3.50" (88.90 mm))

Jack: 1.21" D x 0.67" W x 0.76" H (30.8 mm x 16.9 mm x 19.3 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

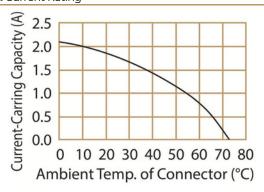
#### **APPLICATIONS**

X.21, V.11, SO, 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 2: Current Rating



Detailed Back View

Cable management bar snaps into the back of the panel.



Grounding lug for attaching 6 AWG (4.5 mm) ground conductor.

