

# Industrial

## SECTION CONTENTS

Industrial MAX® .....	11.1
Industrial MAX 6/6A Outlets .....	11.1
Industrial MAX 5e Outlets .....	11.1
Industrial MAX 5e Plugs .....	11.1
Industrial MAX 6 Modular Patch Cords .....	11.2
Industrial MAX 5e Modular Patch Cords .....	11.2
Industrial MAX Dust Caps .....	11.2
Industrial MAX Surface Mount Boxes .....	11.3
Industrial MAX Stainless Steel Faceplates .....	11.3
Industrial LC Fibre Connectivity .....	11.4 – 11.5
Industrial LC Fibre Plug and Outlet .....	11.5
Field-Installable LC Fibre Connector .....	11.5
Industrial LC Fibre Upgrade Kit .....	11.5

# Industrial MAX<sup>®</sup>

Siemon is well-known for its industry leading high performance connectivity. The same high performance copper and fibre products are available with our patented Industrial MAX housings. Industrial MAX outlets and modular patch cords provide an IP66/IP67-rated seal, protecting plug and outlet contacts from dust, moisture, vibration, and common cleaning chemicals. The Industrial MAX solution is ideal for protecting valuable connections in laboratory environments, hospitals, food processing plants and other harsh environments.



Siemon's patented Pyramid Wire Entry System on S310 blocks separates paired conductors when lacing cables to simplify and reduce installation time.

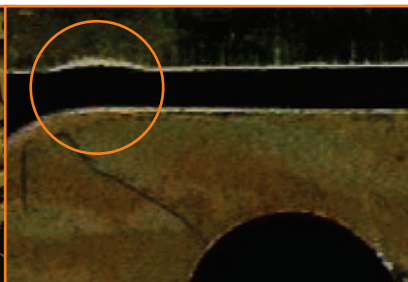
- 1 Standardised Interface** – The Industrial MAX Connector has been recognised by the Open DeviceNet Vendor Association (ODVA), TIA TR 42.9 and IEC 61076-3-106
- 2 Easy Termination** – The UTP Industrial MAX outlet utilises a standard 110 tool for quick and easy punch-down termination
- 3 Universal Wiring** – Each outlet is compatible with both T568A and T568B wiring options
- 4 Ensures Proper Seal** – Bayonet-style mating ensures proper plug depth into the outlet and an IP66/IP67 rated seal

## Meets Harsh Demands of the Environment



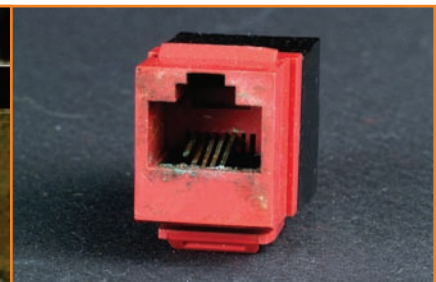
Specially designed Industrial MAX 5e and 6 connectors can withstand humidity, dust and vibration.

## Vibration Causes Pitting In Typical Outlets



Seen under a microscope after exposure to extreme vibration, contact between a typical modular plug and outlet can pit the contact pins, causing intermittent transmission problems.

## Humidity Affects Typical Outlets



Humidity corrodes contact pins inside typical outlets. Repeated exposure can eventually destroy the contact pins, rendering the outlet unusable. The Industrial MAX outlet's special housing prevents this corrosion.

### INDUSTRIAL MAX® 6/6A OUTLETS

The Industrial MAX outlet features a MAX module housed in a protective shell. The outlet's outer housing is made of durable, chemical-resistant, industrial-grade thermoplastic and features Siemon's patented bayonet-style mating design. Category 6 or 6A performance is guaranteed in harsh environments.

The industrial connector's bayonet-style mating prevents over-tightening which could damage contact pins inside the outlet or under-tightening which prevents a proper seal.



Part #	Description
X6	Category 6 UTP, industrial outlet, T568A/B
X6S	Category 6A shielded industrial outlet, T568A/B

### INDUSTRIAL MAX 5e OUTLETS

The Industrial MAX outlet features a category 5e MAX module housed in a protective shell. The outlet's outer housing is made of durable, chemical-resistant, industrial-grade thermoplastic and features Siemon's patented bayonet-style mating design. Guaranteed category 5e performance to 160 MHz even in the most punishing environments.



Part #	Description
X5	Category 5e UTP, industrial outlet, T568A/B
X5S	Category 5e shielded, industrial outlet, T568A/B
X5-X5S	Category 5e shielded, industrial bulkhead coupler (Industrial outlet to industrial outlet)

### INDUSTRIAL MAX 5e PLUGS

The Industrial MAX Plug features a category 5e modular plug contained in Siemon's industrial-grade housing with patented bayonet-style mating design. The plug can be terminated in the field, allowing custom lengths to be assembled quickly on site in the event a cable is cut or damaged. It terminates twisted-pair cable with 22 – 26 AWG (0.64 – 0.40mm) solid or 7-strand conductors with an insulated conductor diameter of 0.86 – 0.99mm.



Part #	Description
XP85	Category 5e UTP, industrial plug, 8-position, 8-contacts
XP85S	Category 5e shielded, industrial plug, 8-position, 8-contacts

## INDUSTRIAL MAX® 6 MODULAR PATCH CORDS

Industrial modular patch cords combine the high performance and quality that Siemon cords are known for with a protective industrial-grade plug housing. These assemblies feature standard MC® 6 cordage with a MC 6 plug on one end and an industrial plug on the other.

Part #	Description
XC6-(XX)	Category 6 UTP, industrial plug-to-industrial plug
XC6-(XX)-B05	Category 6 UTP, industrial plug-to-modular RJ-45 plug, yellow boot

Use (XX) to specify length:  
 03 = 0.9m, 05 = 1.5m, 07 = 2.1m, 10 = 3.1m, 15 = 4.6m



## INDUSTRIAL MAX 5e MODULAR PATCH CORDS

Designed to withstand the rigors of a factory floor environment, our industrial category 5e stranded cordage is petroleum and UV resistant, is not effected by common chemicals and water, operates in a wider temperature range, and provides a longer flex life than normal cords.

Part #	Description
XC5-(XX)	Category 5e UTP, industrial plug-to-industrial plug
XC5-(XX)-B05	Category 5e UTP, industrial plug-to-modular RJ-45 plug, yellow boot
XC5S-(XX)	Category 5e shielded, industrial plug-to-industrial plug
XC5S-(XX)-B05	Category 5e shielded, industrial plug-to-modular RJ-45 plug, yellow boot

Use (XX) to specify length:  
 03 = 0.9m, 05 = 1.5m, 07 = 2.1m, 10 = 3.1m, 15 = 4.6m, 20 = 6.1m



## INDUSTRIAL MAX DUST CAPS

The Industrial MAX dust caps are the ideal way to protect your investment in your industrial cabling system. Outlet dust caps can be used to protect unused outlets or to seal an outlet during wash down periods when the outlet and plug may be disconnected. Plug dust caps protect Industrial MAX patch cords from exposure to elements or accidental damage when not mated to an outlet.

Dust caps are constructed of industrial-grade thermoplastic for superior protection and durability. Additionally, outlet and plug dust caps feature a retention chain, which prevents them from being misplaced when not in use.

XP-CAP2 . . . . .  
 Industrial plug dust cap  
 with retention chain



X-CAP . . . . .  
 Industrial outlet dust cap  
 with retention chain



## INDUSTRIAL MAX® SURFACE MOUNT BOXES

The Siemon Industrial MAX Surface Mount Box (IBOX) mounts either Siemon copper or fibre industrial outlets. Boxes provide an IP66/IP67 (NEMA 4X) seal and can be mounted on virtually any flat surface. Available in 1, 2, 3, and 4-port versions. Compression fittings provided for cable entry.



X-IBOX-01 . . . . .  
Industrial surface mount box,  
1-port, supplied with 1 cable entry  
compression fitting



X-IBOX-02 . . . . .  
Industrial surface mount box,  
2-port, supplied with 2 cable entry  
compression fittings



X-IBOX-03 . . . . .  
Industrial surface mount box,  
3-port, supplied with 3 cable entry  
compression fittings



X-IBOX-04 . . . . .  
Industrial surface mount box,  
4-port, supplied with 4 cable entry  
compression fittings

**Technical Tip!**  
Contact Technical Support for punch tool to create industrial knockouts for custom mounting.

Note: Compression fittings accommodate cable diameters from 4.1-7.9mm

## INDUSTRIAL MAX STAINLESS STEEL FACEPLATES

Mount Siemon's Industrial MAX outlets into these stainless steel faceplates for a protective seal from moisture and debris. The faceplates are available in 1-, 2- and 4-port options with a rear sealing gasket and carry an IP44 rating.



XFP-S-01-SS . . . . .  
Single gang faceplate,  
1-port, stainless steel



XFP-S-02-SS . . . . .  
Single gang faceplate,  
2-port, stainless steel



XFP-D-04-SS . . . . .  
Double gang faceplate,  
4-port, stainless steel

Faceplates include mounting screws with sealed screw head.

## Industrial LC Fibre Connectivity

Another first from Siemon — the Industrial LC Fibre System. The Siemon Industrial LC Fibre solution provides a robust fibre connection with an IP66/IP67-rated seal and is ideal for protecting valuable connections in laboratory environments, hospitals, food processing plants and other harsh environments.

The Siemon Industrial Fibre solution is ideal for installations requiring extended distances (up to 300 metres), in close proximity to heavy sources of EMI, or where fibre active equipment is used.



Rear of adapter accepts standard LC multimode connectors.

- 1 Robust Design** – Protects fibre connections in virtually any harsh environment
- 2 High Performance** – Meets TIA-568-C.3 and, ISO/IEC 11801 Ed 2.0 specifications for multimode components
- 3 Proper Seal** – Bayonet-style mating ensures proper fibre alignment and an IP66/IP67 rated seal
- 4 Specialised Bend Relief** – Compression fitting provides a superior rear seal and ensures fibre meet minimum bend radius requirements
- 5 Field-Termination** – Plug includes two industrial qualified multimode LC connectors that accepts 2 strand, round, breakout style fibre optic cable

### Precision Performance



R&D labs develop, design and implement rigorous testing programs using sophisticated instrumentation. The Industrial LC provides reliability with leading edge technology for applications where highly accurate performance is critical.

### Robust and Reliable



Industrial Fibre connections help to streamline operations, improve product availability, and reduce costs in manufacturing environments.

### Meets Harsh Demands of the Environment



The Industrial LC connector is ideal in areas where chemicals, corrosive gases and liquids are commonplace.

## INDUSTRIAL LC FIBRE PLUG AND OUTLET

Part #	Description
XPLC2-MM	Industrial LC fibre plug, multimode, duplex. Includes two multimode LC connectors
XLC-MM	Industrial LC fibre adapter, multimode, duplex
X-CAP	Industrial outlet dust cap with chain
XP-CAP2	Industrial plug dust cap with chain



Note: Industrial LC fibre plug accepts 2 strand, round, breakout style fibre optic cable with O.D. ranges from 5mm – 8mm with two 2.4mm – 3.0mm jacketed subunits.

## FIELD-INSTALLABLE LC FIBRE CONNECTOR

Siemon multimode LC buffered connectors have been qualified for use in Siemon's industrial fibre system. Use these connectors to terminate 62.5/125 or 50/125 multimode fibre and plug into the rear of the Industrial LC outlet.

Part #	Description
FC1-LC-MM-B80	LC simplex connector, multimode, buffered fibre beige boot
FC2-LC-MM-J80	LC duplex connector, multimode, jacketed fibre beige boot



## INDUSTRIAL LC FIBRE KIT

Use the Industrial LC Kit with Siemon's LightSpeed Termination Kit for Industrial LC connector terminations. The kit contains a dual LC polishing puck, which decreases polish time by 50%. Also included is a dual microscope adapter, which allows inspection of the fibres after the connector has been terminated.

Part #	Description
FTERM-XLC	Industrial LC fibre termination kit used in conjunction with FTERM-L2 includes dual polishing puck and microscope adapter
FT-LC2PUCK	Dual LC polishing puck
FT-MSLC2HEAD	Dual LC microscope adapter

