

# Industrial Mini I/O Connector

## HIGHLY RELIABLE, FIELD INSTALLABLE AND COMPACT I/O SOLUTION

Industrial Mini I/O connector is a compact wire-to-board interface which is field installable in virtually any environment.

- Field installable plug kit
- One quarter the size of a conventional RJ45
- Highly reliable connection with 2 points of contact per line
- Two unique interfaces to prevent mismatching
- Unique locking feature with high cable retention force within the metal housing, resulting in minimal space required



### TARGET MARKETS



### FEATURES

- Meets Cat 5e specifications; 1000Mbit/s speed performance
- Compact size compared to conventional RJ45
- 2 points of contact per line
- Unique locking feature with high cable retention force
- Plug kit field installable
- Two unique interfaces
- Up to 1500 mating cycles
- Versatile solution supporting a wide variety of applications
- High temperature thermoplastic housing

### BENEFITS

- Superior signal integrity
- Saves up to 75% space
- Reduce contact failure
- Enable increased productivity and continuity in high vibration environment
- Protects plug from accidental pulling and unplugging
- Prevents expensive downtime in an industrial environment
- Time saving termination
- Easy to use hand tool which allows field assembly in virtually any environment
- Prevents mismatching
- Enhanced durability
- Ideal for PLCs, Robotics, Industrial communications, Motion and Drives
- Ensures high temperature resistance

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High Temperature Thermoplastic
- Shell: Copper Alloy
- Terminal: Copper Alloy

### MECHANICAL PERFORMANCE

- Durability: up to 1500 mating cycles
- Extraction Force: 98N min.
- Mating Force: 30N max.
- Unmating Force: 30N max.
- Insulation Resistance: 500Mohms min.
- Cable Diameter: 7.1mm max.
- Wire Size: 30AWG to 22AWG

### ELECTRICAL PERFORMANCE

- Rated Voltage: 30V
- Current Rating: 0.5A

### PACKAGING

- Tray
- Tape/Reel

### SPECIFICATION

- Amphenol Product Specification: GS-12-1345, GS-12-1346 and GS-12-1347
- Amphenol Packaging Specification: GS-14-2538

### APPROVAL AND CERTIFICATION

- UL E66906

### ENVIRONMENTAL

- Operating Temperature: -40°C to +85°C

### TARGET MARKETS/APPLICATIONS



Industrial Communications  
Motion and Drivers  
PowerLine Communication (PLC) Connections  
Robotics

## PART NUMBERS

Description	Part Numbers
Industrial Mini I/O 1.27mm pitch 8P Header Assembly, Right Angle, SMT, Type I	10137237-0010LF
Industrial Mini I/O 1.27mm pitch 8P Header Assembly, Right Angle, SMT, Type II	10137237-0020LF
Industrial Mini I/O Plug Kit, D-Shape, Type I, without extended lock ejector	10137846-0010LF
Industrial Mini I/O Plug Kit, D-Shape, Type II, without extended lock ejector	10137846-0020LF
Industrial Mini I/O Plug Kit, D-Shape, Type I, with extended lock ejector	10137846-0011LF
Industrial Mini I/O 1.27mm pitch Receptacle, Vertical, SMT, Type I	10137238-0010LF
Industrial Mini I/O 1.27mm pitch Receptacle, Vertical, SMT, Type II	10137238-0020LF
Industrial Mini I/O 1.27mm pitch Receptacle, Vertical, PIP, Type I	10137849-0010LF
Industrial Mini I/O 1.27mm pitch Receptacle, Vertical, PIP, Type II	10137849-0020LF
Industrial Mini I/O 1.27mm pitch Header Assembly, Right Angle, PIP, Type I	10137850-0010LF
Industrial Mini I/O 1.27mm pitch Header Assembly, Right Angle, PIP, Type II	10137850-0020LF
Industrial Mini I/O Piercing Plug Kit, Top Shell, Type I, Insulation Diameter 1.05-1.15mm (L)	10137239-0010LF
Industrial Mini I/O Piercing Plug Kit, Top Shell, Type I, Insulation Diameter 0.93-1.05mm (M)	10137239-0011LF
Industrial Mini I/O Piercing Plug Kit, Top Shell, Type II, Insulation Diameter 1.05-1.15mm (L)	10137239-0020LF
Industrial Mini I/O Piercing Plug Kit, Top Shell, Type II, Insulation Diameter 0.93-1.05mm (M)	10137239-0021LF
Industrial Mini I/O Piercing Receptacle Kit, Top Shell, Type I, Insulation Diameter 1.05-1.15mm (L)	10137851-0010LF
Industrial Mini I/O Piercing Receptacle Kit, Top Shell, Type I, Insulation Diameter 0.93-1.05mm (M)	10137851-0011LF
Industrial Mini I/O Piercing Receptacle Kit, Top Shell, Type II, Insulation Diameter 1.05-1.15mm (L)	10137851-0020LF
Industrial Mini I/O Piercing Receptacle Kit, Top Shell, Type II, Insulation Diameter 0.93-1.05mm (M)	10137851-0021LF

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