

**Product Presentation** 





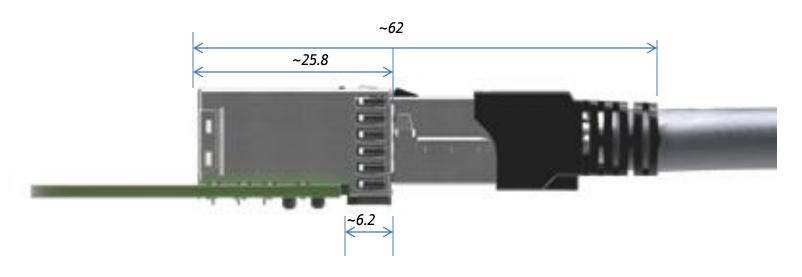
## Amphenol FCi

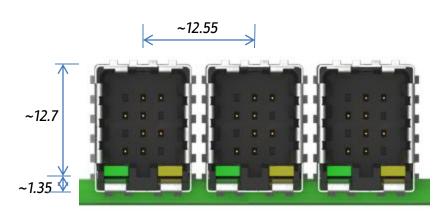
#### **Product introduction**

- Robust I/O for high reliability and high power & SI performance
- Product
  - A robust and reliable IO interconnect solution in 4 pair right angle board and plug mating combination, features high power and signal performance, small form factor, resistivity to over voltages, EMI protection, field terminable for PoE and Industrial IO applications
- Key Features
  - High reliable connection
  - Best in class current rating
  - Enable greater port to port density
  - Suitable for higher operating temperature
  - Signal Integrity performance exceeds Cat 5e & Cat 6
  - ANSI qualified for resistivity to over voltages up to 2.5KV
- Market / Application
  - IP Cameras- Network surveillance cameras, Security systems
  - Voice & Video over Internet Protocol (VoIP) telephony, ADSL, VDSL
  - Wire less Access Points, WiMax Terminals, PoE to Radio, Internet set top box
  - Access control, Home Automation, Digital signage, Lighting

# Amphenol FCi

#### **General dimensions in mm**





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#### **Features and Benefits**

Features	Benefits
Small form factor interface and with 4 additional contacts loading option	Double the density and 30% less panel area than RJ45
Dual beam contacts and four point IDC for plug	<ul><li>Reliable &amp; robust connection</li><li>No arcing damage at contact resting position while removed under load</li></ul>
Mechanical coding and LED option	<ul><li>Prevents wrong insertion</li><li>Displays connectivity</li></ul>
Unique design ensures good SI performances	Connector is no longer the bottleneck, exceeds Cat 5e & Cat 6
Adequate clearance and creepage distance and shielding option	<ul> <li>ANSI qualified for resistivity to over voltages up to 2.5KV</li> <li>EMI suppression and protection from surge</li> </ul>
Current rating of 1.5 Amps per contact	Enables PoE+ & PoE++
Board connector terminal option	PIP or Pressfit
Field terminable & Factory certified standard patch cord lengths	Flexibility and options

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#### **Target Market & Applications**

- Typical products/ Equipments
  - New generation Base station/ Ethernet Radio/ Routers/ Access points
  - Pan-Tilt-Zoom (PTZ) video surveillance IP cameras
  - Heated cameras
  - Video conferencing
  - Thin client workstations
  - POS Terminals
  - Video IP phones
  - BlueTooth™ access points
  - Door interlock systems
  - Security cameras
  - Access control, Home Automation, Digital signage, Lighting
  - Machine to Machine interface

## Amphenol FCi

#### **Design Objectives**

- Number of contact positions: 8 (Standard) and 4 additional contacts loading option
- Number of differential pairs: 4 (Standard)
- Contact rating: 1.5 Amps/ contact at 57 Volts DC
- ANSI qualified for resistivity of over voltage up to 2.5KV
- Electrical performance
  - Insertion loss: -0.0082 at 100MHz (Typical)
  - Return loss: -37db at 100MHz (Typical)
  - NEXT Crosstalk: -60db at 100Mhz (Typical)
  - DWV for contact to contact : 2000V, 60Hz, 1 minute
- IEC 61076-4-104
- IEEE 802.3bz, SI performance meets Cat 5e & Cat 6.
- Port to Port width: 12.55 mm for shielded
- Mechanical durability: 500 mating cycles
- Cable size: 24 to 30 AWG, insulation wire dia.: 0.90+0.05mm
- Temperature range
  - Operating: -40°C to 125°C
  - Storage: -65°C to 125°C
- UL 1977 Current interruption test



## **THANK YOU**

