Amphenol’s SFP connector series is a 20 position connector and cage combo for mounting to a host PCB with a metal cage enclosing the connector. These connectors are similar to the Gigabit Interface Converter Interface (GBIC), but they are smaller in size and operate at much faster data transfer rates.

Amphenol single port and stacked versions are rated up to 10 Gbps. They are available in standard RoHS compliant or non-RoHS compliant versions. The cages are a one-piece construction with enhanced transceiver mating tabs presently available in press-fit version, with solder version and longer or shorter pins available as custom options.

Applications

- Fibre Channel
- Gigabit Ethernet
- InfiniBand™
- Servers
- Routers
- Storage Devices
- Switches
- Optical Devices
- Networking Devices

Product Specification for SFP cages and connector system

The interconnect system comprises of an SFP cage assembly which is used with 20 position SFP connectors complying with MSA Agreement INF-8074i.

Availability: 1X1, 1x2, 1x4 and 1x6 cages as well as versions with heat sinks and light pipes, including stacked 2x1 and 2x4 are available. SFP+ and enhanced EMI performance cages also available.

General Requirements

- RoHS compliant
- Cages are tray packaged or tape and reel (single port)
- Dust cover for front face is available (bulk packed)
- Industry standard EIA-364

Mechanical Characteristics

Accepts multiple transceivers per INF-8074i
Durability of 250 mating cycles

Electrical Characteristics

Hot swappable
Operating voltage 3.3V at 0.5A maximum
Cages include spring contacts for superior EMI grounding
Selected versions provide enhanced EMI shielding through the use of supplementary ground tabs.

Materials

Cage: Copper alloy, nickel plated.
Selected versions available with matte tin over nickel.
- Enhanced EMI versions incorporate stainless steel ground tabs

Connectors:

- Contacts: Copper allopating - refer to p/n table
- Housing: Glass reinforced lead-free process solder reflow compatible UL94V-O

Temperature Rating

- Operating Temperature = -55°C to +85°C
- Storage Temperature = -55°C to +105°C

Packaging

- Tape and reel available for single port,
- Tray packaging for all sizes.
- Bulk packaged dust covers

www.sfpconnectors.com
Telephone: (416) 291-4401 Fax: (416) 754-8668 E-Mail: sales@amphenolcanada.com

All specifications are subject to change without notice.
### SFP & XFP Connector

**Series Designation (RoHS)**

- **Style**
  - A = R/A single surface mount connector

- **Number of Positions**
  - 20 = 20 position SFP connector
  - 30 = 30 position XFP connector

- **Contact Plating**
  - 2 = 30µ" gold plating on mating area
  - 3 = 30µ" gold plating RoHS plating on termination (tin matte)
  - 5 = 15µ" gold plating on mating area
  - 6 = 15µ" gold plating RoHS plating on termination (tin matte)

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### SFP Cage

**Series Designation**

- **Style**
  - A = One row
  - C = One row cage + Light Pipe combo
  - E = One row cage + Heat Sink combo
  - F = One row cage 1 deg angle

- **Number of Port in Row**
  - 1 = Single in row
  - 1 = Tab grounding
  - 2 = Enhanced EMI tabs
  - 6 = SFP+/IPF cage
  - 1 = Standard

**Packaging**

- T = Tape and reel packaging

**Lubricant Option**

- 0 = Non lubricated
- 0 = Standard
- 0 = Standard (black)

**Plating**

- 0 = No plating (for low cost version)
- 1 = Bright tin (for wave solder)
- 2 = Nickel
- 3 = Matte tin (for reflow up to 245 degree)

**Mounting**

- Various options available
  - Consult sales or website for details

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**Contact Amphenol for additional options**
Ganged & Stacked Options

2x1 SFP Cage & Connector Combo

Custom 2x1 SFP Cage & Connector Combo

1x6 Cage

1x4 Cage

2x2 Combo (planned)

2x4 Combo
Heat Sinks & Light Pipe Options

1x4 SFP cage with heat sinks

Single port SFP cage with heat sinks

1x4 SFP cage with light pipes

1x6 SFP cage with light pipes
### Ordering Information

**SFP Cage & Connector**

**Series Designation**
- RoHS 5 for Press Fit Pins on connector
- RoHS 6 for Through Hole Pins on connector

**Style**
- A - Single connector + cage combo
- B - Stacked connector and cage
- C - Single/stacked con, cage, Light Pipe (on Top) combo
- D - Stacked connector+cage, Light Pipe (in the cage)
- L - Stacked low profile combo

**Number of Port in Row**
- 1 - 1X1 or 2X1
- 2 - 1X2 or 2X2
- 4 - 1X4 or 2X4

- 1 - Standard
- X - Various options available, customer specific

Consult sales or website for details

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**Packaging**
- 1 - Tray packaging (stacked)
- T - Tape and reel packaging
  (Both connector and cage)
- H - T&R for connector/tray for cage
  (for 1Xn only)

**Plating Options for Cage**
- 1 - Bright tin (for wave soldering)
- 2 - Nickel
- 3 - Matte tin (for SMT soldering)

**Plating Options for Connector**
- 1 - 30µ" gold plating on mating area
  150-300µ" tin/lead on termination
- 2 - 30µ" gold plating on mating area
  gold flash on termination
- 3 - 30µ" gold plating on mating area
  150-300µ" matte tin on termination
- 4 - 15µ" gold plating on mating area
  150-300µ" tinhead on termination
- 5 - 15µ" gold plating on mating area
  gold flash on termination
- 6 - 15µ" gold plating on mating area
  150-300µ" matte tin on termination

**Optional Dust Cover**
- 0 - Without dust cover
- D - With dust cover (shipped loose)

**Heat Sink / Light Pipe Option**
- 0 - None
- X - Other options available, customer specific