# ExpressPort<sup>™</sup> SFP+ 1xN Cage & Connector



Amphenol's ExpressPort<sup>™</sup> SFP+ 1xN Connector, when combined with the ExpressPort<sup>™</sup> SFP+ Cages, provides data transfers speeds of up to 14 Gbps. The design of the ExpressPort<sup>™</sup> SFP+ Connector minimizes impedance discontinuities and reflections at high data rates, and provides a 10 to 20 dB improvement in Near-End Crosstalk.

Amphenol's unique ExpressPort<sup>™</sup> SFP+ cage construction features EMI shielding available in the form of metal spring fingers, or elastomeric gaskets. These cages also eliminate ventilation holes near the front of the cage to prevent potential catch points for the mating module EMI springs. Additional features include light pipes, which can be purchased with cages or separately, heat sinks, and other custom features.

# **Specification Highlights**

The interconnect system is comprised of a cage assembly which is used with 20-position SFP+ connectors complying with SFF-8083. Cages comply with industry standard SFF-8433.

### **General Characteristics**

- RoHS compliant
- Industry standard footprint
- Industry standard EIA-364

#### **Mechanical Characteristics**

- Accepts multiple transceivers per INF-8074i and SFF-8431
- Compliant press-fit pins or solder tails (1x1 cages)
- Durability: 250 mating cycles minimum

# **Electrical Characteristics**

- Hot swappable
- Operating voltage: 3.3 V
- Operating current: 0.5 A
- Differential impedance: 100  $\Omega+\!/\text{--}10~\Omega$
- DWV: 300 V AC
- Insulation resistance: 1000  $\text{M}\Omega$  min
- Contact resistance: 70 m $\Omega$  max

#### **Options**

- EMI shielding
  - Metal spring fingers
  - Conductive elastomeric gasket
- Round light pipe
- Heat sink
- Dust cover



1x1 SFP+ Cage with Light Pipes and Elastomeric Gasket U77-C1419-2001

# Materials

- Cage
  - Base material: copper alloy
  - Plating: nickel or tin
  - Light pipe: optical grade polycarbonate
  - Heat sink: aluminum alloy
  - Heat sink clip: stainless steel
  - Dust cover: thermoplastic
- Connector
  - Contact base material: copper alloy
  - Contact plating: gold on mating area; gold or matte tin on termination
  - Housings: glass reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated

# **Temperature Rating**

- Operating temperature: -55 °C to +85 °C
- Storage temperature: -55 °C to +105 °C

# **Configurations** (Rows x Ports per row)

• 1x1 • 1x2 • 1x4 • 1x6

# Packaging

- Tape and reel packaging: connector or 1x1 cage
- Tray packaging: cage of all sizes
- Bulk packaging: dust cover

1x4 SFP+ Cage with Elastomeric Gas

1x6 SFP+ Cage with Light Pipes and Elastomeric Gasket U77-C641M-2081

1x4 SFP+ Cage with Elastomeric Gasket U77-A441M-2081 1x6 SFP+ Cage

# HIGH SPEED

Ordering Information	Contact Amphenol for additional options
ExpressPort™ SFP+ UE76 - A 20 - Connector	×××××
UE76 SERIES DESIGNATION (RoHS) A STYLE A - R/A Single Surface Mount Connector	PACKAGING       X         J - Tape and Reel Packaging 480/Reel       X         T - Tape and Reel Packaging 500/Reel       X         LUBRICANT OPTION       X
20 NUMBER OF POSITIONS 20- 20 Positions	0 - Non Lubricated 1 - Lubricant Added
<ul> <li>X CONTACT PLATING</li> <li>2 - 30μ<sup>a</sup> Gold Plating on Mating Area Gold Flash on Termination</li> <li>3 - 30μ<sup>a</sup> Gold Plating on Mating Area</li> </ul>	OPTION 2 X 0 - Standard 1 - Resonance Cancelation Features
Matte Tin Plating on Termination 5 - 15µ" Gold Plating on Mating Area Gold Flash on Termination 6 - 15µ"Gold Plating on Mating Area Matte Tin Plating on Termination	OPTION 1 0 - Standard (Black)

Ordering Information Contact Amphenol for additional options ExpressPort<sup>™</sup> SFP+ Cage U77 SERIES DESIGNATION (RoHS) PACKAGING **1** - Tray Packaging (ACC Re-Packed) T - Tape and Reel Packaging (For 1x1 only) STYLE A - One Row **OPTION 1** C - One Row Cage + Light Pipe Combo (on Top) E - One Row Cage + Heat Sink Combo 0 - Standard 7 - Cage with Extra Bottom Spring Fingers, F - One Row Cage 1 degree Angle No Bottom Mid G-pins NUMBER OF PORT IN ROW 8 - Cage with Half Moon Mid G-pins X 9 - Cage with Extra Bottom Spring Fingers 1 - Single in Row **2** - Inline 1x2 and Half Moon Mid G-pins 4 - Inline 1x4 **OPTIONAL DUST COVER** 6 - Inline 1x6 0 - Without Dust Cover CHASSIS GROUNDING OPTIONS D - With Dust Cover (Ship Loose) 3 - Metal Spring Fingers (No Bottom Latch Cover) PLATING 4 - Elastomeric Gasket 6 - Metal Spring Fingers (1 Piece Design Bottom Latch Cover) 1 - Bright Tin (for Wave Solder) 2 - Nickel HEAT SINK/LIGHT PIPE OPTION 3 - Matte Tin (for Reflow 245 degree) 1 - No Heat Sink/Light Pipe Option PCB MOUNTING OPTIONS 2 - Heat Sink Option 3 - Light Pipe Option (for 1xN Cage Only) Various options available Consult sales or website for details 1X4 SFP+ Cage with Heat Sink

1X4 SFP+ Cage with Heat \$ U77-E462M-2081

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