

# ExpressPort™ SFP+ 1xN Cage & Connector



Amphenol's ExpressPort™ SFP+ 1xN Connector, when combined with the ExpressPort™ SFP+ Cages, provides data transfers speeds of up to 14 Gbps. The design of the ExpressPort™ 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™ 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  $\Omega$  +/-10  $\Omega$
- DWV: 300 V AC
- Insulation resistance: 1000 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

### 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

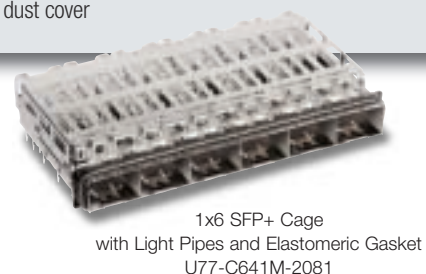
- Tape and reel packaging: connector or 1x1 cage
- Tray packaging: cage of all sizes
- Bulk packaging: dust cover



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



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



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

## Ordering Information

Contact Amphenol for additional options

### ExpressPort™ SFP+ Connector

UE76 - A 20 - X X X X X

#### UE76 SERIES DESIGNATION (RoHS)

##### A STYLE

A - R/A Single Surface Mount Connector

##### 20 NUMBER OF POSITIONS

20 - 20 Positions

##### X CONTACT PLATING

- 2 - 30µ" Gold Plating on Mating Area  
Gold Flash on Termination
- 3 - 30µ" Gold Plating on Mating Area  
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

#### PACKAGING

- J - Tape and Reel Packaging 480/Reel
- T - Tape and Reel Packaging 500/Reel

#### LUBRICANT OPTION

- 0 - Non Lubricated
- 1 - Lubricant Added

#### OPTION 2

- 0 - Standard
- 1 - Resonance Cancellation Features

#### OPTION 1

- 0 - Standard (Black)

## Ordering Information

Contact Amphenol for additional options

### ExpressPort™ SFP+ Cage

U77 - X X X X X - X X X X X

#### U77 SERIES DESIGNATION (RoHS)

##### X STYLE

- A - One Row
- C - One Row Cage + Light Pipe Combo (on Top)
- E - One Row Cage + Heat Sink Combo
- F - One Row Cage 1 degree Angle

##### X NUMBER OF PORT IN ROW

- 1 - Single in Row
- 2 - Inline 1x2
- 4 - Inline 1x4
- 6 - Inline 1x6

##### X CHASSIS GROUNDING OPTIONS

- 3 - Metal Spring Fingers (No Bottom Latch Cover)
- 4 - Elastomeric Gasket
- 6 - Metal Spring Fingers (1 Piece Design Bottom Latch Cover)

##### X HEAT SINK/LIGHT PIPE OPTION

- 1 - No Heat Sink/Light Pipe Option
- 2 - Heat Sink Option
- 3 - Light Pipe Option (for 1xN Cage Only)

#### PACKAGING

- 1 - Tray Packaging (ACC Re-Packed)
- T - Tape and Reel Packaging (For 1x1 only)

#### OPTION 1

- 0 - Standard
- 7 - Cage with Extra Bottom Spring Fingers,  
No Bottom Mid G-pins
- 8 - Cage with Half Moon Mid G-pins
- 9 - Cage with Extra Bottom Spring Fingers  
and Half Moon Mid G-pins

#### OPTIONAL DUST COVER

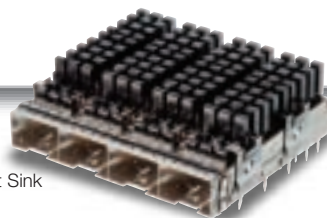
- 0 - Without Dust Cover
- D - With Dust Cover (Ship Loose)

#### PLATING

- 1 - Bright Tin (for Wave Solder)
- 2 - Nickel
- 3 - Matte Tin (for Reflow 245 degree)

#### PCB MOUNTING OPTIONS

Various options available  
Consult sales or website for details



1X4 SFP+ Cage with Heat Sink  
U77-E462M-2081