# ExtremePort™ OSFP 224G Connectors

## EXTREMEPORT™ OSFP 224G INTERCONNECT SYSTEM

Amphenol's ExtremePort™ OSFP 224G interconnect system is comprised of a 60 position, 0.6mm pitch connector built for use in high-speed serial applications. Each port supports up to 1.6Tb/s in aggregate over an 8x224Gb/s electrical interface. The OSFP footprint is optimized for signal integrity performance. A riding heat sink on the 1xN OSPF cage for optimal thermal performance is a design feature. Amphenol ExtremePort™ OSFP 224G interconnect system is one of the industry's leading multi-lane pluggable form factors used across Ethernet, Fibre Channel, and InfiniBand.

- Operating at 224Gb/s PAM-4 for up to 1.6Tb/s aggregate bandwidth solution
- OSFP series product with 8 channels per port
- Backwards mating compatible with 56G and 112G OSFP
- Multiple connector and heat sink configurations

### TARGET MARKETS

### FEATURES

- Electrical interface employs 8 lanes that support 224Gb/s PAM4, providing solutions up to 1.6Tb/s aggregate bandwidth
- Enables up to 57.6 Tb/s aggregate bandwidth in a single switch slot
- Backwards mating compatible with 56G and 112G OSFP
- Supports passive & active copper and optical solutions products
- Multiple connector configurations
- MSA supported standard interface
- Multiple heat sink options
- RoHS & REACH compliant

### BENEFITS

- Enables 400G, 800G, 1.6T aggregate bandwidth per port
- A single switch slot can have 36 ports OSFP
- Allows for use of either 56G, 112G or 224G OSFP products in any port
- Enables use of DAC, short and long range optical
- Single (1x1), ganged (1xN) connector and cage configurations
- Amphenol offering meets or exceeds MSA defined product specifications
- Allows user to choose from multiple options to maximize heat dissipation
- Environmentally friendly

# TECHNICAL INFORMATION

## MATERIAL

- Housing: Black color, Glass-reinforced, lead-free solder reflow process compatible thermoplastic
- Contacts Base Material: Copper Alloy
- Plating Solder Tails: Matte Tin over Nickel
- Plating Mating Area: Gold
- Resonance Dampening Feature: Stainless Steel

## ELECTRICAL PERFORMANCE

- Operating Voltage: 30VDC per contact
- Operating Current: 0.5A per signal contact; 2.5A per power contact
- Differential Impedance: 92Ω ± 10Ω

## MECHANICAL PERFORMANCE

- Durability: 100 mating cycles
- Mating Force: 40N max. (55N if the cage has riding heat sink)
- Unmating Force: 30N max. (45N if the cage has riding heat sink)
- PCB thickness for 1xN Cage:
  - 1.40mm min. for single mounted
  - 2.20mm min. for belly to belly mounted

## ENVIRONMENTAL

- Operating and Storage Temperature: -40°C to +85°C
- RoHS & REACH & Halogen-free

## SPECIFICATIONS

- Cage Mounting: Thru Bezel
- EMI Options: Spring fingers
- Configurations:
  - 1XN (N=1, 2, 3, 4, 5)

## PACKAGING

- Tape and Reel (connector)
- Tray (cage)

## TARGET MARKETS/APPLICATIONS

Cellular Infrastructure
Network Interface Cards
SAN-Storage Attached Networks
Wireless Base Station
Telecom

Hubs
Switch
Router and Server
Datacom
Networking Equipment
Data Center Switching Applications
Storage System
Supercomputer
High density Ethernet Switching/Routing Products

Test and Measurement Equipment

# PART NUMBERS

| Description | Part Numbers |
|---|---|
| ExtremePort™ OSFP 224G 1x1 SMT connector | V62-AEZ01-0400XXT (X represents various options) |
| OSFP 1x1 cage assembly | UE62-B1620-02X21 (X represents various options) |
| OSFP 1x1 cage assembly with heat sink | UE62-B162G-021E1 |
| OSFP 1x2 cage assembly | UE62-B2620-02XE1 (X represents various options) |
| OSFP 1x2 cage assembly with quad light pipes | UE62-C2624-02XE1 (X represents various options) |
| OSFP 1x3 cage assembly | UE62-B3620-0S1E1 |
| OSFP 1x4 cage assembly | UE62-B4620-0XXX1 (X represents various options) |
| OSFP 1x4 cage assembly with heat sink | UE62-B462G-021E1 |
| OSFP 1x4 cage assembly with dual light pipes | UE62-C4621-02X21 (X represents various options) |
| OSFP 1x1 RHS cage assembly (low profile) | UE62-F(D)162G-X2XX1 (X represents various options) |
| OSFP 1x2 RHS cage assembly (low profile) | UE62-F(D)262G-XSXX1 (X represents various options) |

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