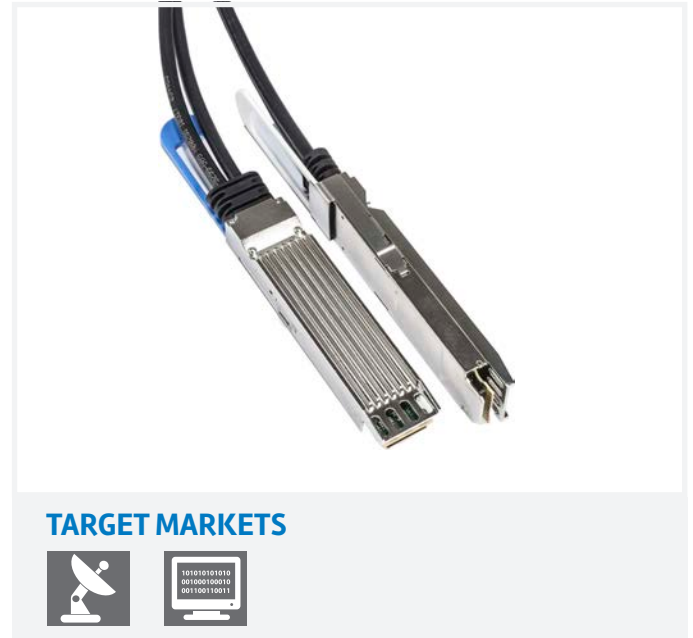


# OSFP (Octal Small Form Factor Pluggable) Copper Cable Assemblies

## 200G / 400G / 800G SOLUTIONS

Amphenol's leading the industry in OSFP cable development. Our *Electronics Products* 'Product of the Year' award-winning OSFP (Octal Small Form Factor Pluggable) cable assemblies are compatible with 25G/lane channel NRZ up to 112G/lane channel PAM4 signaling protocols that allow the cables to deliver aggregate bandwidths of 200G, 400G, and 800G per cable assembly.

- Comprehensive system integrated interconnect design for copper or optical based cable solutions
- Addresses current and future market desired bandwidth port capability requirements
- Optimized heat dissipative and air flow features to maximize the heat dissipative properties of the system
- Meets signal performance requirements up to 3 meter
- Provides cost and performance optimized solutions across multiple cable assembly lengths



### FEATURES

- Configurable & flexible
- Optimized PCB interface board with auto soldering process
- EEPROM in cable assembly
- Assembled with industry leading twin-axial SKEWCLEAR® 8-pair or 16-pair wire
- Integrated heat sink and air flow channels as part of module design
- 32AWG – 25AWG cable sizes
- RoHS2 compliant
- Passive copper length to 3 meter
- Custom solutions supported
- 15 watt single port dissipative heat capacity

### BENEFITS

- 200G, 400G, or 800G aggregate bandwidth capacity, dual 8-pair or single 16-pair wire supported
- Exceeds 25G NRZ and 50G, 112G PAM4 performance and SI parameter in standard specification
- Programmable to customer requirements
- Great SI reliability and physical capabilities (softer and better bending performance than other cables)
- Fully compliant with optical module design, easier for customer system development
- Provides optimized cost, performance, cable bulk & routing solutions
- Environmentally friendly
- Meets industry standard signal performance requirements up to lengths of 3 meter
- Custom solutions from adapter cables to loopback cables and beyond
- Enables use of copper as well as short and long reach optical applications

# OSFP (Octal Small Form Factor Pluggable) Copper Cable Assemblies

## TECHNICAL INFORMATION

### MATERIAL

- Nickel plated die cast shells
- EM-888k laminated PCB with gold finger and solder pads
- Dual 8 differential pair or single 16 differential pair wire with EMI shielding braid and LSZH or PVC jacketing
- Thermoplastic cable pull tab

### ELECTRICAL PERFORMANCE

- Differential Impedance:  $100\Omega \pm 10\Omega$
- SI performance 25G NRZ / 50G PAM4, Infiniband and OIF specifications (per MSA agreement)

### MECHANICAL PERFORMANCE

- Durability: 50 cycles
- Mating Force: 40N max.
- Modular Retention: 25N min.
- Cable Flex: Per SFF-8417

### ENVIRONMENTAL

- Service life to exceed 5 years at 65°C

### APPROVALS AND CERTIFICATIONS

- RoHS2 Compliant

### SPECIFICATIONS

- Refer to the latest revision specification of the OSFP octal small form factor pluggable module
- Applicable IEEE specifications
  - IEEE802.3bs
  - IEEE802.3cd
  - IEEE802.3bj
  - IEEE802.3bm

### PACKAGING

- Individually packed in anti-static bags
- Cable ends packaged with dust covers

### TARGET MARKETS/APPLICATIONS



Low Latency Communications Systems  
Network Interface Card (NICs)  
Routers  
Switches



Data Center Networking  
External Storage Systems  
High Performance Computing (HPC) Networked Storage Systems  
Server

## PART NUMBERS

Description	Length	AWG	Part Numbers
OSFP Copper Cable Assembly	0.5 meter	32	NDVVYR-0006
OSFP Copper Cable Assembly	1.0 meter	32	NDVVYR-0001
OSFP Copper Cable Assembly	1.0 meter	30	NDVVYF-0001
OSFP Copper Cable Assembly	1.5 meter	30	NDVVYF-0004
OSFP Copper Cable Assembly	1.75 meter	30	NDVVYF-0007
OSFP Copper Cable Assembly	2.0 meter	28	NDVYVG-0002
OSFP Copper Cable Assembly	2.5 meter	25	NDVVYX-0005
OSFP Copper Cable Assembly	3.0 meter	25	NDVVYX-0003