

QSFP56-200GB-DR4-AO

MSA and TAA 200GBase-DR4 QSFP56 Transceiver (SMF, 1310nm, 500m, MPO, DOM) CMIS 4.0

Features:

- 4x53.125Gbps PAM4 Electrical Interface (200GAUI-4)
- Supports 212.5Gbps Aggregate Bit Rate
- MPO-12/APC Connector
- Single 3.3V Power Supply
- Hot-Pluggable
- Transmission Length Up to 500m with SMF
- Low Power Dissipation: 5.0W
- Operating Temperature: 0 to 70 Celsius
- CMIS 4.0 Compliant
- RoHS Compliant and Lead-Free

Applications:

- 200GBase Ethernet

Product Description

This MSA compliant QSFP56 transceiver provides 200GBase-DR4 throughput up to 500m over single-mode fiber (SMF) using a wavelength of 1310nm via an MPO connector. It has been programmed, uniquely serialized, and tested for data-traffic and application to ensure that it will initialize and perform identically. All of our transceivers comply with Multi-Source Agreement (MSA) standards to provide seamless network integration. Additional product features include Digital Optical Monitoring (DOM) support which allows access to real-time operating parameters. This transceiver is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S.-made or designated country end products."



Absolute Maximum Ratings

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|----------------------------|--------|-------|---------|-------|------|-------|
| Supply Voltage | Vcc | 3.135 | | 3.465 | V | |
| Storage Temperature | Tstg | -40 | | 85 | °C | |
| Operating Case Temperature | Tc | 0 | | 70 | °C | |
| Data Rate Per Lane | DR | | 26.5625 | | Gbd | |

Electrical Characteristics

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|---|--------|------|------|------|------|-------|
| Power Consumption | PC | | | 5.0 | W | |
| Transmitter | | | | | | |
| Differential Pk-Pk Input Voltage Tolerance | VIN | 300 | | 900 | mV | |
| Differential Termination Mismatch | | -10 | | 10 | % | |
| Receiver | | | | | | |
| Differential Pk-Pk Output Voltage Tolerance | VOUT | 300 | | 900 | mV | |
| DC Common-Mode Voltage | | -350 | | 2850 | mV | |
| Differential Termination Mismatch | | -10 | | 10 | % | |

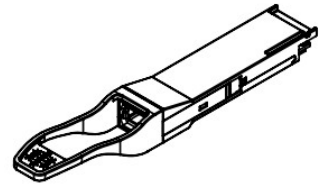
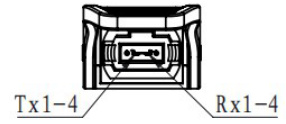
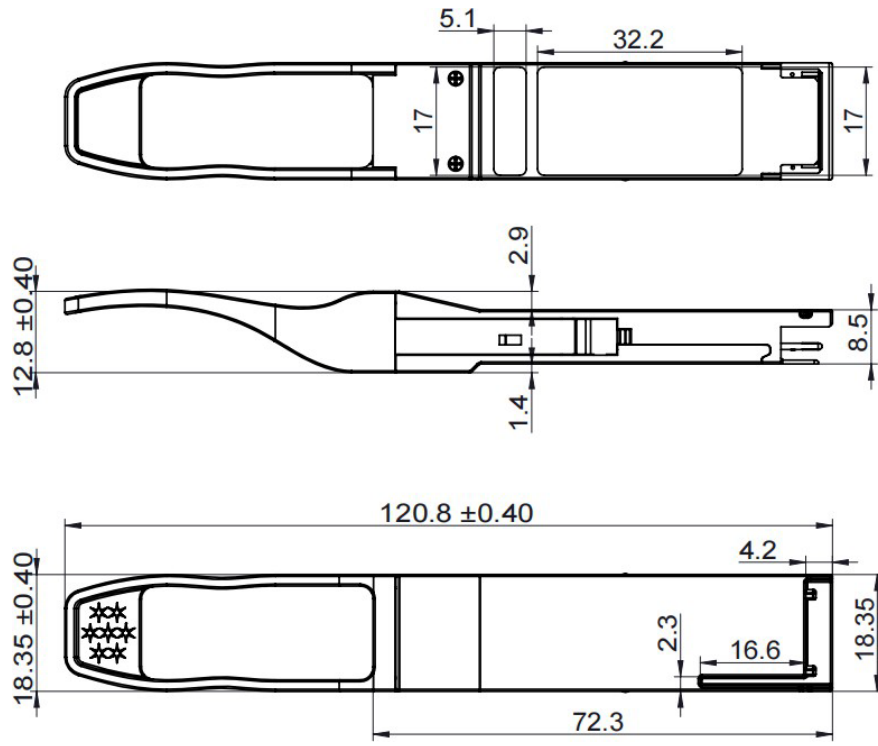
Optical Characteristics

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|--|--------|--------|------|--------|------|-------|
| Transmitter | | | | | | |
| Center Wavelength | L0 | 1304.5 | | 1317.5 | nm | |
| | L1 | 1304.5 | | 1317.5 | nm | |
| | L2 | 1304.5 | | 1317.5 | nm | |
| | L3 | 1304.5 | | 1317.5 | nm | |
| Side-Mode Suppression Ratio | SMSR | 30.0 | | | dB | |
| Average Optical Power | PAVE | -5.1 | | 3.0 | dBm | |
| Average Optical Power (OMA) | POMA | -3.0 | | 2.8 | dBm | |
| Extinction Ratio | ER | 3.5 | | | dB | |
| Transmission and Dispersion Eye Closure for PAM4 | TDECQ | | | 3.4 | dB | |
| Optical Return Loss Tolerance | ORLT | | | 21.4 | dB | |
| Transmitter Reflectance | TR | | | -26.0 | dB | |
| Receiver | | | | | | |
| Damage Threshold | DTH | 4.0 | | | dBm | |
| Average Receiver Power | | -8.1 | | 3.0 | dBm | |
| Receiver Reflectance | Rfl | | | -26.0 | dB | |
| Receiver Sensitivity (OMA_{outer}) | SENOMA | | | -6.6 | dBm | |
| Stressed Receiver Sensitivity (OMA_{outer}) | | | | -4.1 | dBm | 1 |

Notes:

1. Measures at 2.4×10^{-4} BER conformance test signal at TP3 for the BER specified in IEEE 802.3 200GBase-DR4.

Mechanical Specifications



About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is ingrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications ranging from NEBS Level 3 to ISO 9001:2015 with every new development while maintaining the signature reliability of its products.



U.S. Headquarters

Email: sales@addonnetworks.com Telephone: +1 877.292.1701

Fax: 949.266.9273

Europe Headquarters

Email: salesemea@addonnetworks.com

Telephone: +44 1285 842070