

## QSFP56-200GB-DR4-AR-AO

Arista Networks® Compatible TAA 200GBase-DR4 QSFP56 Transceiver (SMF, 1310nm, 500m, MPO, DOM) CMIS 4.0

### Features

- 4x53.125G PAM4 Electrical Interface (200GAUI-4)
- MPO-12/APC Connector
- Supports 212.5Gbps Aggregate Bit Rate
- Hot-Pluggable QSFP56 Form Factor
- Transmission Length Up to 500m with SMF
- Single +3.3V Power Supply
- Operating Temperature: 0 to 70 Celsius
- Low Power Dissipation: < 5.0W
- RoHS Compliant and Lead-Free
- CMIS 4.0 Compliant



### Applications

- 200GBase Ethernet

### Product Description

This Arista Networks® compatible QSFP56 transceiver provides 200GBase-DR4 throughput up to 500m over single-mode fiber (SMF) using a wavelength of 1310nm via an MPO connector. Our transceiver is built to meet or exceed OEM specifications and is guaranteed to be 100% compatible with Arista Networks®. 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."



## Operating Conditions

Parameter	Symbol	Min.	Max.	Unit
Operating Case Temperature	Tc	0	70	°C
Supply Voltage	VccT, VccR	3.135	3.465	V
Total Power Consumption	PC		5.0	W

## Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Data Rate	DR		26.5625		Gbd	1
<b>Transmitter</b>						
Differential Peak-to-Peak Input Voltage Tolerance	VIN	300		900	mV	
Differential Termination Mismatch		-10		10	%	
<b>Receiver</b>						
Differential Peak-to-Peak Output Voltage Tolerance	VOUT	300		900	mV	
DC Common-Mode Voltage		-350		2850	mV	
Differential Termination Mismatch		-10		10	%	

### Notes:

1. Per lane.

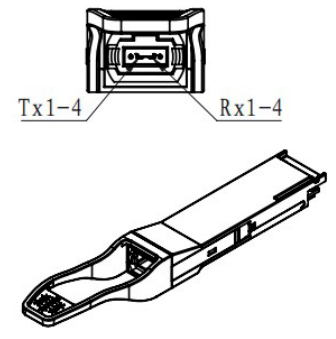
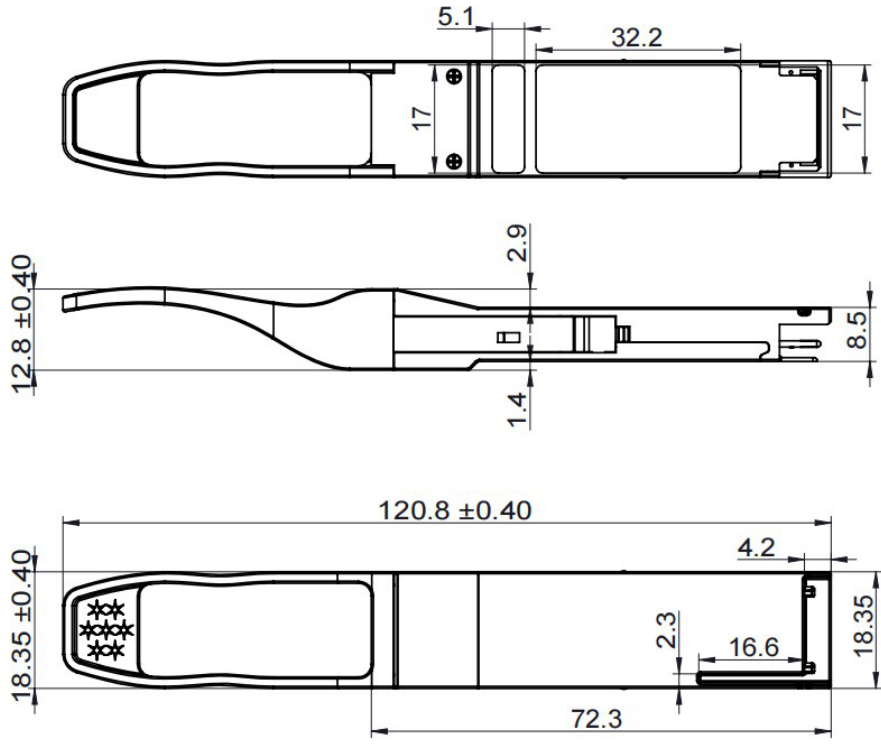
## Optical Characteristics

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

### Notes:

1. Measured at  $2.4 \times 10^{-4}$  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.



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