Product Datasheet

2-port Gigabit Fiber Media Converter Board
(ONV1110-SCX)

OVERVIEW

The ONV1110-SCX is a Gigabit fiber media converter board independently developed by ONV. It has 1*10/100/1000Base-T port and 1*1000M uplink SC fiber port. User can select different optical modules, such as multi-mode dual fiber, single-mode dual fiber, and single-mode single fiber. The media converter adopts the enterprise-class Taiwan Realtek company's carrier-grade chip solution, which has stable performance, good quality, and high cost performance. It is suitable for optical fiber access application scenarios such as security monitoring, wireless coverage, intelligent transportation, and safe cities to form a cost-effective and stable communication network. Unmanaged mode, plug, and play, no configuration, easy to use.

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FEATURE

■ **Gigabit photoelectric Ethernet transmission**

◇ Support non-blocking wire-speed forwarding.

◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.

◇ Support 10/100/1000M RJ45 port and 1000M SC fiber port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ **Easy to use and simple to maintain**

◇ Full-duplex/half-duplex working mode with auto-negotiation function.

◇ Automatic identification of twisted pair MDI/MDI-X cross lines and parallel lines.

◇ LED working status indication for network diagnosis and fault checking, reducing maintenance workload.

◇ Plug and play, no configuration required, centralized power supply and centralized connection management through 2U-16 slot rack.

◇ Compatible with IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X network protocol, 10/100/1000M R45 port rate auto-negotiation.

TECHNICAL SPECIFICATION

Model	ONV1110-MCX	ONV1110-SCX	ONV1110S-SCX-A/B
Interface Characteristics			
Interface	1*1000M uplink SC fiber port (Data) 1*10/100/1000Base-T RJ45 port (Data)		
Ethernet Port	10/100/1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption		
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)		
Optical Fiber Port	1.25Gbps, Multi-mode dual fiber SC port	1.25Gbps, Single-mode dual fiber	1.25Gbps, Single-mode single

		SC port	fiber SC port
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500m, 1310nm/ 0-2km	Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.	

Chip Parameter

Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	2.0Gbps
Forwarding Rate@64byte	3.0Mpps
MAC	2K
Buffer Memory	1M
Jumbo Frame	1632byte
LED Indicator	Power: PWR (Green), L/A: (Green) Half/full duplex: FDX (Green), Rate: 100/1000 (Green)

Power Supply

Power Supply	Centralized power supply by 16-slot 2U rack
Total PWR / Input Voltage	3.5W/ (5VDC)
Power Consumption	Standby<1W, Full Load<4W

Physical Parameter

Operation TEMP / Humidity	-20°C~+55°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40°C~+85°C, 5%~95% RH Non condensing
Dimension (L*W*H)	100*80*3mm

Net Weight	<0.03kg
Installation	Must be installed and used with 2U-16 slot rack
Certification & Warranty	
Lightning Protection	Port Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	3 years, lifelong maintenance.

CONNECTION DIAGRAM

ORDERING INFORMATION

Model	Description
ONV1110-MCX	Gigabit **multi-mode dual fiber** media converter board with 1*10/100/1000M RJ45 port and 1*1.25G SC fiber port. 850nm wavelength, default transmission distance 0-550m, with 16 slots 2U rack.
ONV1110-SCX	Gigabit **single-mode dual fiber** media converter board with 1*10/100/1000M RJ45 port and 1*1.25G SC fiber port. 1310nm wavelength, default transmission distance 0-20km. with 16 slots 2U rack.

ONV1110S-SCX-A	Gigabit **single-mode single fiber** media converter board with 1*10/100/1000M RJ45 port and 1*1.25G SC fiber port. 1310nm/1550nm wavelength, default transmission distance 0-20km. with 16 slots 2U rack.
ONV1110S-SCX-B	Gigabit **single-mode single fiber** media converter board with 1*10/100/1000M RJ45 port and 1*1.25G SC fiber port. 1310nm/1550nm wavelength, default transmission distance 0-20km. with 16 slots 2U rack.

PACKING LIST

	Content	Qty	Unit
Packing List	2-port Gigabit fiber media converter board	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

CONTACT US

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