

# CS-110

## Media Converters

### Description:

The CS-110 series are Fast Ethernet-Fiber Converters designed to be media interfaces between 10/100Base-TX Ethernet copper pairs cable and 100Base-FX fiber optics cable. They feature a RJ-45 connector, and a single or pair of fiber optic connectors. The Fast Fiber Converters give you the freedom to extend your 10/100 Mbps cabling distance by allowing connectivity 2 up to 5 kilometers for multimode optical fiber and 30 up to 120 kilometers using singlemode optical fiber. The CS110-W31(55) utilizes 1310 nm/1550 nm high performance WDM technology to provide TX and RX over a single fiber cable for distances of 20 - 40 km. CWDM wavelengths 1470 – 1610 nm are available on request. LED indicators signal the power status of the converter, the Ethernet port and the FX port activity.

The CS-110 series supports the SNMP network management monitoring, Far-End-Fault and Link-Fault-Pass-Through functions included.

The standard type of CS-110 introduces a stand alone box powered from a 5-12 V DC power supplier.

### Versions :

- The FTTH (Fiber To The Home) media converter is designed for installation at the end user side. The optical fiber cable is terminated inside the converter box to protect it against damage or unqualified handling (... -FTTH)
- The additional CS-110-MP panel allows installation of the media converters into all cabinets from the system of Optokon optical distribution frames instead of a coupling panel (... -RM)
- DIN rail mounting kit available (... -DR)



CS-110-S31-SC-30-DC2



CS-110-S31-SC-30-AC



CS-110-S31-NC-30-FTTH

### Specifications:

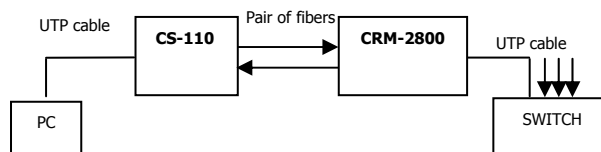
Standards	IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX
Protocol	CSMA/CD
Interface	RJ-45 connector, using UTP 100 Ohm Cat. 3, 4 or 5 cable SC (ST) connector: 62.5/125 $\mu$ m or 50/125 $\mu$ m MM fiber optic cable SC, FC connector: 9/125 $\mu$ m SM fiber optic cable
Wavelength	MM: 850 nm, 1300 nm fiber: 62.5/125 $\mu$ m or 50/125 $\mu$ m SM: 1310 nm, 1470-1610 nm fiber: 9/125 $\mu$ m WDM: TX & RX combined in one fiber Type: W31: TX=1310 nm; W55: TX=1550 nm
Maximum Segment Length	UTP cable (10Base-T, 100Base-TX): 100 m MM fiber optic pair, full duplex: 2 or 5 km SM fiber optic pair, full duplex: 30, 40, 50, 80 or 120 km
Environmental: Temperature Humidity	0° C to 70 °C (Operating), -40 °C to +85 °C on request 10% to 90% (Non-condensing)
External Power Supply	Input rating: 110 or 230 V AC, 50-60 Hz Output rating: 5 - 12 V DC, 800 mA
Dimensions	DC, DC2 type : 105 x 70 x 23 mm (L x W x H) AT, FTTH type : 155 x 105 x 28 mm (L x W x H) AC type: 150 x 126 x 31 mm (L x W x H)

## Ordering Code:

### SM and MM converters – Pair of fibers

CS-110		XXX	XX	XX	XXX <sup>5)</sup>	
<b>M30</b>	MM 1300 nm (LED)	<b>SC<sup>2)</sup></b> SC/PC	<b>02</b>	2 km (MM)	<b>DC</b>	External power supply 5 V DC
<b>M85</b>	MM 850 nm (VCSEL)		<b>05</b>	5 km (MM)	<b>DC2</b>	External power supply 5-12 V DC
<b>S31</b>	SM 1310 nm		<b>30</b>	30 km	<b>AC</b>	Internal power supply 230 V AC
<b>S55</b>	SM 1550 nm		<b>40</b>	40 km	<b>FTTH</b>	End user site application
<b>S47-S61<sup>1)</sup></b>	CWDM wavelengths		<b>50</b>	50 km	<b>RM</b>	DC type with rack mount front panel
			<b>80<sup>4)</sup></b>	80 km	<b>DR</b>	DC type with DIN rail mounting kit
			<b>120<sup>4)</sup></b>	120 km	<b>CC</b>	Converter card into CRM-2800 chassis

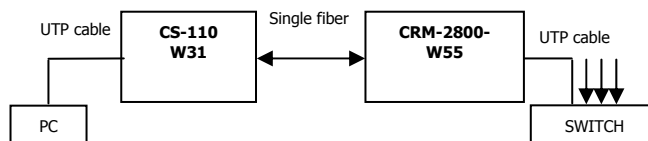
- 1) CWDM wavelengths 1470 – 1610 nm on request
- 2) Other connector type (FC, LC, ...) on request
- 3) FTTH:
  - designed for optical cable termination (splice holder and two SC pigtails included)
- 4) Wavelength 1550 nm and CWDM lasers
- 5) XXX - Customer design, on request (FO interface at rear site, etc.)



### WDM converters – Single fiber

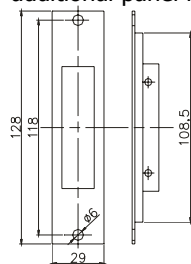
CS-110		XXX	XX	XX	XXX	
<b>W31</b>	WDM 1310 TX	<b>SC</b> SC/PC	<b>20</b>	20 km	<b>DC</b>	External power supply V DC
<b>W55</b>	WDM 1550 TX		<b>30<sup>1)</sup></b>	30 km	<b>DC2</b>	External power supply 5-12 V DC
			<b>40<sup>1)</sup></b>	40 km	<b>FTTH</b>	End user site application
					<b>AC</b>	Internal power supply
					<b>AT</b>	Advanced type, DC power supply
					<b>RM</b>	DC type with rack mount front panel
					<b>DR</b>	DC type with DIN rail mounting kit
					<b>CC</b>	Converter card - into CRM-2800 chassis

- 1) AC, AT and FTTH types only



## Options:

additional panel for rack mount (-RM) version



CS-110-MP