

# CS-100C

## Mini-size 100M media converter USB powered

### Description:

The **CS-100C** series are small size 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 kilometers for multimode optical fiber and 30 up to 60 kilometers using single mode optical fiber. LED indicators signal the power status of the converter, the Ethernet port and the FX port activity. The power supply of converters is ensured via USB Micro-B port.



CS-100C-S31-SC-20-USB

### Features:

- 100BASE-FX Fiber to 10/100BASE-T(X) UTP Converter
- Duplex or Bi-Di SC fiber optic interface
- Full duplex / duplex adaptive transmission
- Power supply: USB Micro-B
- Single mode and multimode application

### Specification:

<i>Standards</i>	IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX
<i>Frame Size</i>	10 240 Bytes max frame size
<i>Mode</i>	Store and Forward Switch Mode <sup>1</sup>
<i>Fiber Cable</i>	Multimode: 50/125, 62.5/125 μm Single mode: 9/125 μm
<i>Fiber Connector</i>	Duplex / single SC
<i>UTP Connector</i>	RJ-45 (EIA/TIA 568A/B, Cat5 or higher grade)
<i>LED Display</i>	POW, LINK, FPD, TPX, 100
<i>Dimensions</i>	45 x 57 x 22 mm
<i>Weight</i>	100 g
<i>USB Power Input Connector</i>	USB 2.0, USB Micro-B
<i>Output of AC/DC Power Adaptor</i>	0.5 A @ 5 V DC (Connector DC 2.5x5.0mm)
<i>Input of AC/DC Power Adaptor</i>	100-120 V AC / 210-230 V AC The plug type shall be specified in customer's PO.
<i>MTBF</i>	More than 50 000 hours, in accordance with the standard of telecom operation
<i>Temperature Operation</i>	-40 °C to +80 °C
<i>Temperature Storage</i>	-40 °C to +85 °C
<i>Humidity</i>	5 to 95 % not condensing
<i>RoHS compliant</i>	

<sup>1</sup> By default CS-100C works in „Store and Forward Switch Mode“, „Converter mode“ is for request.

**Ordering Code:**

<b>CS-100C</b>	-	<b>XXX</b>	-	<b>XX</b>	-	<b>XX</b>	-	<b>XXX - I<sup>4</sup></b>	
		<b>XXX:</b> wavelength <b>M30</b> MM 1300 nm <b>S31</b> SM 1310 nm <b>S55</b> SM 1550 nm <b>B31/55<sup>3</sup></b> Bi-Di 1310 TX <b>B55/31<sup>3</sup></b> Bi-Di 1550 TX		<b>XX:</b> Optical <sup>1</sup> <b>SC</b> connector <b>ST</b> connector		<b>XX:</b> Distance <b>02</b> 2 km (MM) <b>20</b> 20 km / 1310 nm <b>40</b> 40 km / 1310 nm <b>60</b> 60 km / 1310 nm <b>80</b> 80 km / 1550 nm <b>100</b> 100 km / 1550 nm <b>120</b> 120 km / 1550 nm		<b>XXX:</b> Power supply <b>USB<sup>2</sup></b> USB cable <b>DC<sup>2</sup></b> AC/DC adapter included	

Note: 1) Other on request

2) USB cable included, AC/DC power adaptor on request

3) Bi-Di transceivers available distance see table below

4) Industrial temperature range -40°C to +80°C

**Duplex transceiver parameters:**

Rate	LD	Wavelength (nm)	Average output optical power (dBm)	Sensitivity (dBm)	Transmission distance (km)
155 Mbps	FP	1310	≥ -12	≤ -36	20
155 Mbps	FP	1310	≥ -10	≤ -37	40
155 Mbps	FP	1310	≥ -6	≤ -38	60
155 Mbps	DFB	1550	≥ -8	≤ -38	80
155 Mbps	DFB	1550	≥ -3	≤ -38	100
155 Mbps	DFB	1550	≥ 0	≤ -39	120

**Bi-Di transceiver parameters:**

Rate	LD	Wavelength (nm)	Average output optical power (dBm)	Sensitivity (dBm)	Transmission distance (km)
155 Mbps	FP	1310	≥ -12	≤ -35	20
155 Mbps	FP	1550	≥ -12		
155 Mbps	FP	1310	≥ -10	≤ -35	40
155 Mbps	DFB	1550	≥ -10		
155 Mbps	FP	1310	≥ -6	≤ -35	60
155 Mbps	DFB	1550	≥ -10		

**LED Indicator:**

LED	Color	Function	LED	Color	Function
POW	Green	<b>ON:</b> Power is available	FPD	Green	<b>ON:</b> fiber signal detected <b>OFF:</b> fiber unplugged
TPL	Green	<b>ON:</b> TP link OK <b>OFF:</b> TP link fail <b>Flash:</b> link OK & activity	TPX	Green	<b>ON:</b> full duplex <b>OFF:</b> half duplex <b>Flash:</b> half & collision detected
FXL	Green	<b>ON:</b> FX link OK <b>OFF:</b> FX link fail <b>Flash:</b> link OK & activity	100	Green	<b>ON:</b> 100M <b>OFF:</b> 10M