



FE-C130 / FE-C130U:

10/100Base-TX to 100Base-FX Bridge Fiber Converter with LFP / (USB-powered)

Key Features

- LFP (Link Fault Pass-through) Function
- Power from External Power Adapter (FE-C130) or from USB Port (FE-C130U)
- Choice of SC, ST or LC connector for multimode and single mode
- DIP Switch to set configurations
- Supports packet length up to 1536 bytes
- RoHS Compliance

Overview

FE-C130/FE-C130U is a 10/100Base-TX to 100Base-FX media converter, which features LFP (Link Fault Pass-through) function for easily tracing the network link failure. LFP function can enhance the integrity and conformity of the TP-Fiber linking to improve the maintainability of the network. FE-C130 is powered through external power adapter while FE-C130U uses power from USB port on the hosting device such as PC or NB. This unique idea of using USB port power offers great flexibility when deploying this converter. Five LEDs are provided to monitor the operation status of the converter and the DIP Switch on the side panel is used to set the required working configurations to meet various applications.

FE-C130/FE-C130U can be used as a standalone unit or as a slide-in module to Ruby Tech's CR-10XX converter rack (up to 10 units) for use at a central wiring closet.

Technical Specifications

- **Standard Compliance:** IEEE802.3u 10/100Base-TX, 100Base-FX
- **Data Transfer Rate:**

Speed	Forwarding Rate
100Mbps	148,800 PPS
10Mbps	14,880 PPS

- **Buffer Memory:** 128K
- **Connector:**
RJ-45: 10/100Mbps (Auto-negotiation)
ST/SC/LC: 100Mbps
- **Cable:**
TP: Cat.5 (Support distance up to 100m)
Fiber (M-M): 50/125, 62.5/125, 100/140µm (Support distance up to 2Km)
Fiber (S-M): 8.3/125, 8.7/125, 9/125, 10/125µm(Support distance up to 100Km)
- **Flow Control:**
IEEE802.3x compliant for full-duplex
Backpressure flow control for half-duplex
- **Fiber Transceiver Specifications:**

Connector Type	ST/SC	SC.S05	SC.S20	SC.S40	SC.S60	SC.S80	SC.SA0
Fiber Type	MM	SM	SM	SM	SM	SM	SM
Wavelength TX/RX(nm)	1310	1310	1310	1310	1310	1550	1550
Typical Distance(Km)	2	5	20	40	60	80	100
Min. TX PWR (dbm)	-19	-20	-15	-8	-5	-6	-6
Max. TX PWR (dbm)	-14	-8	-8	-2	0	-4	-4
RX Sensitivity (dbm)	-30	-32	-31	-34	-34	-34	-36
Link Budget (dbm)	11	12	16	26	29	28	30

Connector Type	BS3.S20	BS5.S20
Fiber Type	SM	SM
Wavelength TX/RX(nm)	1310	1550
Typical Distance(Km)	20	20
Min. TX PWR (dbm)	-14	-14
Max. TX PWR (dbm)	-8	-8
RX Sensitivity (dbm)	-31	-31
Link Budget (dbm)	17	17

• LED Indicator

LED	Color	Function
FX LNK/ACT	Green	Lit when both fiber & TP connection are good Blink when fiber data is present
FX FDX/COL	Amber	Lit when full-duplex mode is active Off when half-duplex mode is active Blink when collision is present
TX LNK/ACT	Green	Lit when TP connection is good Blink when TP data is receiving
TX 100	Green	Lit when TP speed is 100Mbps Off when TP speed is 10Mbps
POWER	Green	Lit when 5V power is coming up

• DIP Switch Function:

- (1) TP port mode: Auto (default) or Force
- (2) TP port speed: 100 or 10 when TP at Force
- (3) TP port duplex: FDX or HDX when TP at Force
- (4) LFP: LFP enabled (default) or disabled
- (5) Fiber port duplex: 100 FDX (default) or 100 HDX

• Power Requirement:

- FE-C130: 1A@+5VDC from AC-DC Adapter
 FE-C130U: 0.5A@+5VDC from USB port

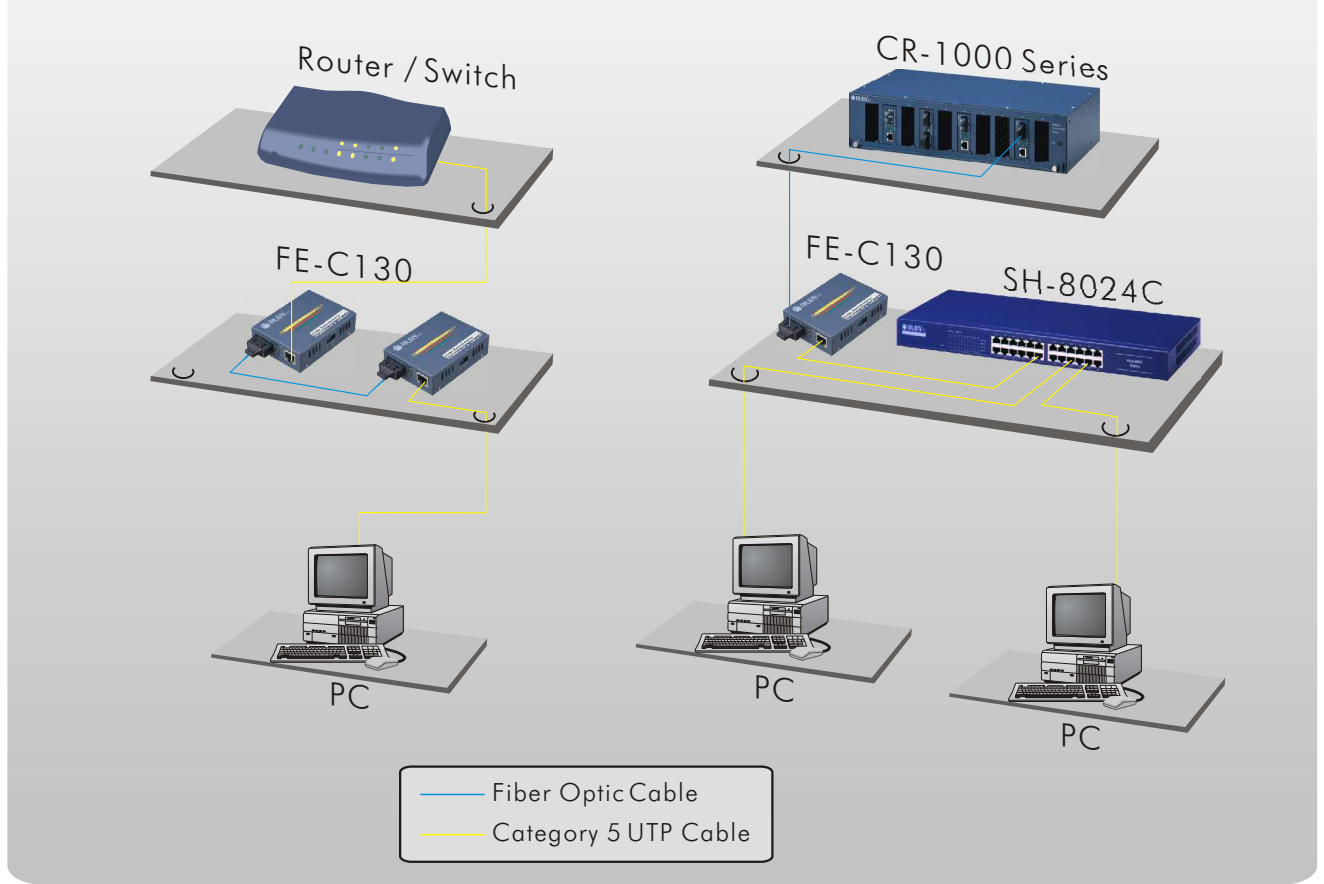
• Operation Temperature: 0~50°C
• Humidity: 5~90%
• Dimensions: 26.2(H) x 70.3(W) x 94(D) mm
• Weight: 0.2kg
• Certification: FCC Part 15 Class A & CE Mark
Packing Information

Model	Carton Dimensions (mm)	pcs/Carton	N.W (KG)	G.W (KG)
FE-C130ST	530x512x345	40	24	25
FE-C130LC	530x512x345	40	24	25
FE-C130SC	530x512x345	40	24	25
FE-C130SC.Sxx	530x512x345	40	24	25
FE-C130BSx.xx	530x512x345	40	24	25

Ordering Information
FE-C130 Model

ST	
FE-C130ST	ST Multi-Mode, with USB jack
LC	
FE-C130LC	LC Multi-Mode, with USB jack
FE-C130LC.S20	LC Single-Mode 20km, with USB jack
FE-C130LC.S40	LC Single-Mode 40km, with USB jack
FE-C130LC.S60	LC Single-Mode 60km, with USB jack
SC	
FE-C130SC	SC Multi-Mode, with USB jack
FE-C130SC.S05	SC Single-Mode 5km, with USB jack
FE-C130SC.S20	SC Single-Mode 20km, with USB jack
FE-C130SC.S40	SC Single-Mode 40km, with USB jack
FE-C130SC.S60	SC Single-Mode 60km, with USB jack
FE-C130SC.S80	SC Single-Mode 80km, with USB jack
FE-C130SC.SA0	SC Single-Mode 100km, with USB jack

Bidi-SC	
FE-C130BS3.S20	Bidi-SC 20km,1310nm
FE-C130BS3.S40	Bidi-SC 40km,1310nm
FE-C130BS3.S60	Bidi-SC 60km,1310nm
FE-C130BS5.S20	Bidi-SC 20km,1550nm
FE-C130BS5.S40	Bidi-SC 40km,1550nm
FE-C130BS5.S60	Bidi-SC 60km,1550nm



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