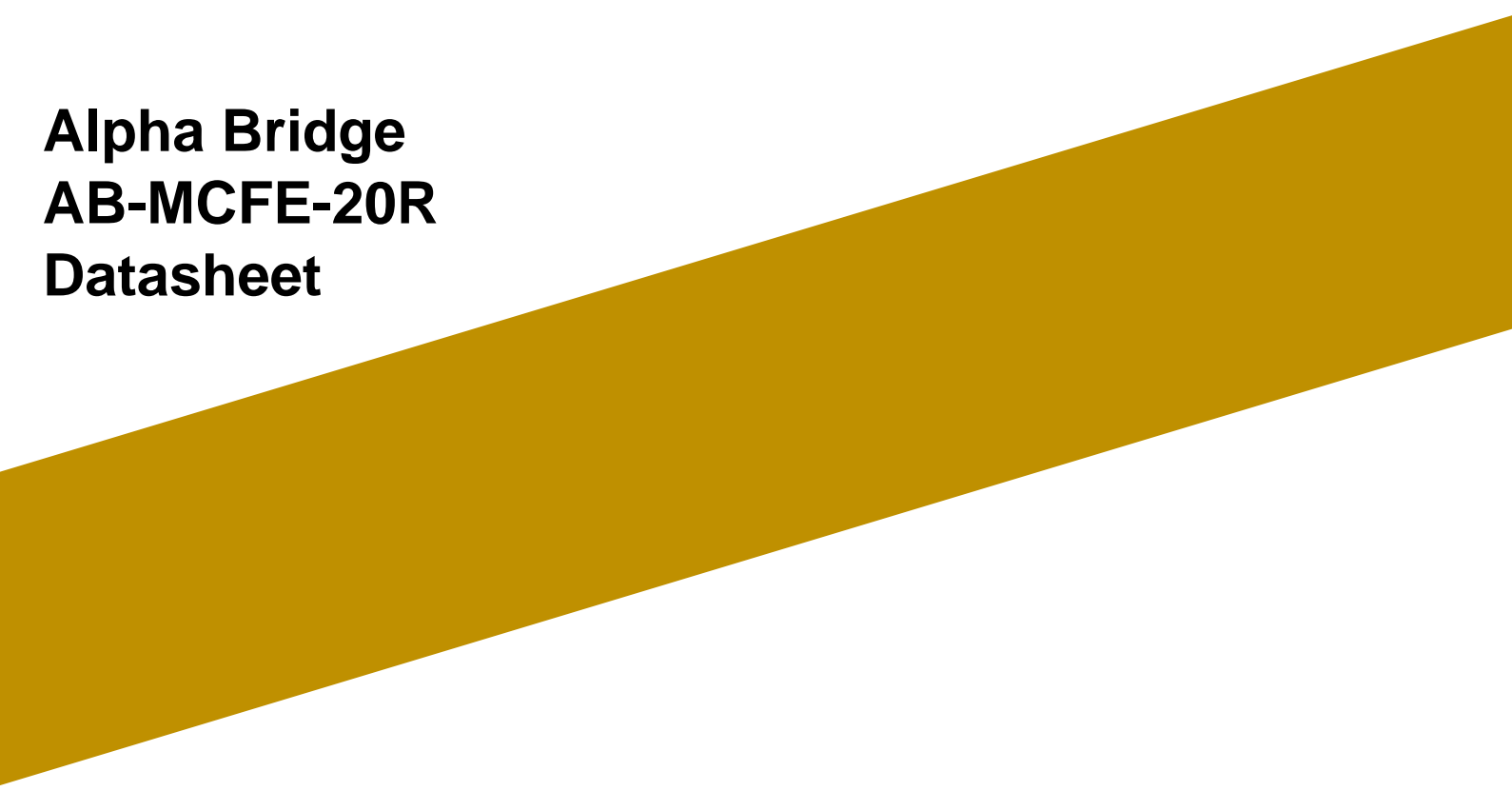


**Alpha Bridge
AB-MCFE-20R
Datasheet**



Features

- Supports 100Base-FX standard;
- Supports auto MDI-MDIX function;
- LED display for link/activity, full/half duplex, 10/100M
- Supports modified cut-through frame forwarding for low latency;
- Supports pure converter mode data forwarding for extremely low latency;
- Supports flow control for full and half duplex operation;
- Bandwidth control;
- Forward 1600 bytes packet for management;
- max. transmission distance can be 120km;
- SC (default)/FC/ST supported.

Optional Features

- Supports link fault pass through function (LFP);
- Supports for end fault function;
- Support EEPROM configuration;
- Pass all packets without address and CRC check;
- Forward fragments.

Standard

- IEEE802.3 ETHERNET STANDARD
- IEEE802.3u FAST ETHERNET STANDARD
- IEEE802.3x FLOW CONTROL STANDARD
- IEEE802.3ab FRAME SIZE STANDARD

Description

The media converter transmits the Ethernet signal transmission media from the CAT Cable to the optical fiber. It can extend the transmission distance up to 120km. Using a media converter is an economical solution to achieve long-distance transmission based on current status.

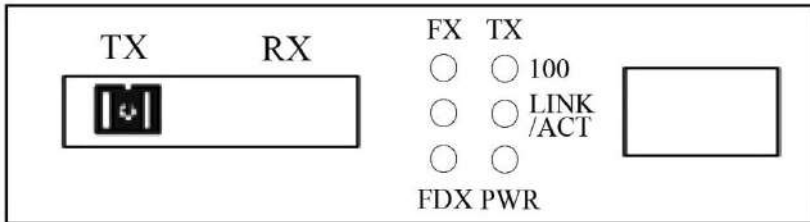
Specification

Optical Specs.	Fiber Port	1port SC, FC/ST/LC optional
	Fiber Type	Dual Fiber or BiDi
	Wavelength & Distance	Dual Fiber: Multimode 1310nm 2km Single mode 1310nm, 1550nm from 10km to 120 km BiDi: 1310/1550nm 2/10/20/40km; 1490/1550nm 60/80/100/120km
Ethernet Specs.	Cable	Twisted-pair
	Transmission Type	10/100Mbps Full Duplex/Half Duplex
	Distance	100meter
BER		<1E-9
Data Buffer		1024kb
Power		2.5w
Power Temp. Variation		0.2mw /°C

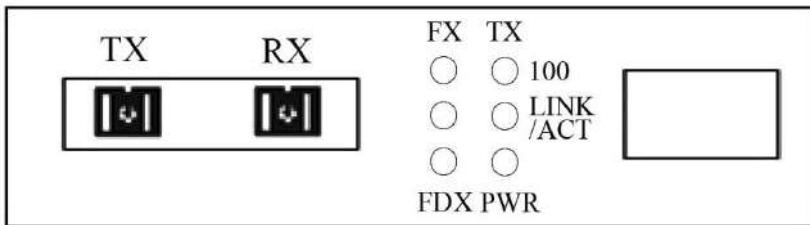
Operate Temp.	0~70°C	
Storage Temp.	-40~85°C	
Humidity	95% non-condensing	
Power Supply	AC100~240V -50/60Hz +5V DC, -48VDC (optional)	
Weight	0.4KG	
Dimension	External power	95x70x26mm
	Internal power	140x110x30mm

Front Panel

10/100M BiDi SC front panel



10/100M Dual SC front panel



Back Panel

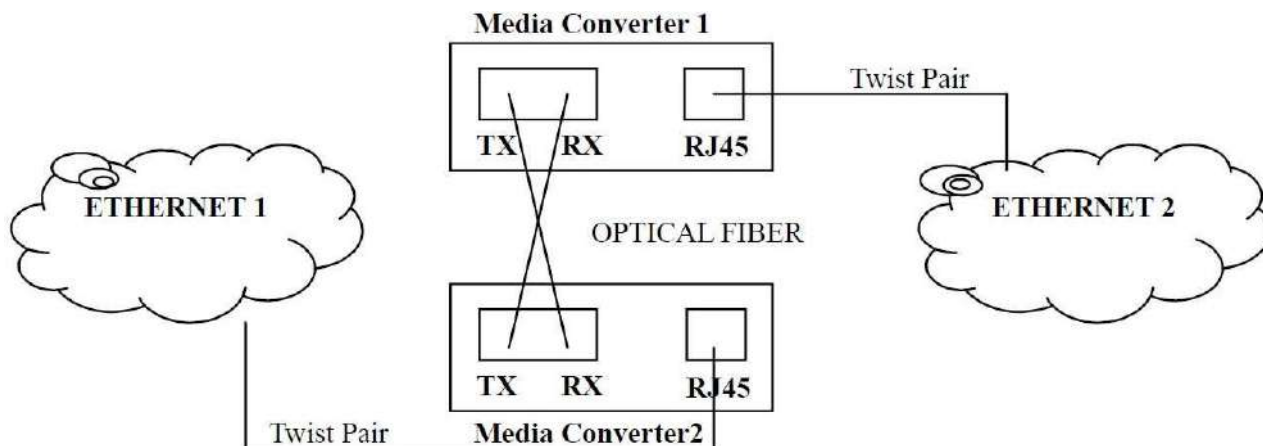


LED Indicator Description

LED	STATUS	
PWR	ON	Power ON
	OFF	Power OFF
FDX	ON	Full Duplex
	OFF	Half Duplex
FX	ON	Transmit Fiber Optical Signal
	OFF	No Fiber Optical Signal
TX	ON	100Base-TX
	OFF	No Ethernet Signal
TX-LINK/ACT	ON	Linked on UTP Port
	FLASH	Activity
	OFF	Not Linked
FX-LINK/ACT	ON	Linked on Fiber Port

	FLASH	Activity
	OFF	Not Linked

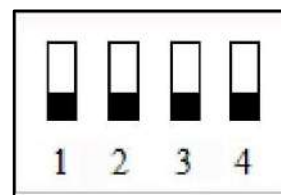
Application



Dip Switch

The top position is ON; the Low position is OFF

PIN 1	ON	LFP enable
	OFF	LFP disable
PIN 2	OFF	Store and forward switch
PIN 3	OFF	
PIN 2	OFF	Modified cut-through switch
PIN 3	ON	
PIN 2	ON	Converter mode
PIN 3	OFF	
PIN 2	ON	Auto change forward
PIN 3	ON	
PIN 4	ON	TP force speed mode, duplex mode



Ordering Information

Part Number	Rate	Wavelength(nm)	Distance(km)	Tx Power	Rx Sen. (db)	Fiber
AB-MCFE-20R	10/100Mbps	T1550/R1310	20	-8~-3	-34	SM BiDi SC

Note: All information in this document is subject to change without notice.

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