

Fibrain's FGMS-B53Y-0xx media converter is an ideal solution for users which wants to extend Gigabit/Fast Ethernet network range beyond 100 meters limit. This device works with singlemode fiber. WDM technology used in optical module (BiDi) allows for bidirectional data transmission over single strand of fiber. Auto-negotiation enabled copper interface can support 10/100/1000Mbps speeds and auto MDI/MDIX. FGMS-B53Y-0xx can be installed in Fast Ethernet and Gigabit Ethernet networks. For packet switching between TX and FX interfaces store-and-forward architecture was used, support for VLAN tagged frames. Media converter is equipped with high quality optical transceiver which assures stable and error free transmission over 5/20/40km\*\* long optical line. This device is powered from external AC/DC power adaptor (220V AC/5V DC included, EU version). This media converter can also be installed in rack mounted chassis FR-16C-AC or FR-16C-DC which can accommodate up to 16 units (metal enclosure must be removed before installation in FR-16C-XX). Rack mounted chassis is 2U high and is equipped with redundant power supply.



Part number: FGMS-B53Y-0xx

### Key features:

- 10/100/1000Base-T to 1000Base-LX signal conversion
- Transmission distance: up to 5/20/40km\*\*
- Singlemode SFP BiDi WDM Module (1550/1310nm)
- Passive cooling
- High quality components
- MAC address auto-learning and auto-updating
- Store-and-forward architecture
- Supporting FDX flow control or HDX back pressure
- Supporting Auto-negotiation for RJ45 interface
- Supporting frames up to 9k bytes long
- LED status display:
  - Port activity,
  - Power
  - Transmission speed
  - Copper interface link
  - Optical interface link
- MTBF time exceeding 500 000 hours



## Technical specification:

<b>Transmission speed:</b>	10/100/1000Mbps			
<b>Standards compliance:</b>	IEEE802.3	10Base-T Ethernet,		
	IEEE802.3u	100Base-TX Fast Ethernet,		
	IEEE802.3ab	1000Base-T Gigabit Ethernet ,		
	IEEE802.3z	1000Base-LX/EX Gigabit Ethernet		
	IEEE802.3x	Flow control		
<b>Wavelength:</b>	TX:1550nm / RX: 1310nm			
<b>Certificates:</b>	CE, RoHS			
<b>Estimated reach:</b>	Optical port:	up to 5/20/40km**		
	Port RJ45:	CAT5: 100m		
<b>Optical parameters:</b>	<b>Model</b>	<b>Transmission power</b>	<b>Receiver sensivity</b>	<b>Overload</b>
	FGMS-B53Y-005	-9dBm ~ -3dBm	-18dBm	0dBm
	FGMS-B53Y-020	-9dBm ~ -3dBm	-21dBm	0dBm
	FGMS-B53Y-040	-3dBm ~ 2dBm	-24dBm	-3dBm
<b>Ports:</b>	Copper:	RJ45		
	Optical:	LC Simplex		
<b>Conversion method:</b>	store-and-forward			
<b>Delays:</b>	<10us			
<b>BER:</b>	<1/1000000000			
<b>LED Display:</b>	PWR, FXL, TXL, 100M, 1000M, FDX			
<b>Power:</b>	External power supply: 220V AC / 5V DC (1000mA)			
<b>Power consumption:</b>	<5W			
<b>Operating environment:</b>	Temperature:	0 ~ 50 °C		
	Humidity:	5%~90% noncondensing		
<b>Storage environment:</b>	Temperature:	-40 ~ 70 °C		
	Humidity:	5%~90% noncondensing		
<b>Case material:</b>	Aluminium			
<b>Weight:</b>	0.15kg netto; 0.40kg brutto			
<b>Dimensions:</b>	25mm (height) x 70mm (width) x 93mm (depth)			

Specification is subject to change without end user notification. Submitted pictures are for reference only. Actual product look may differ from presented on pictures

\* - without optical transceiver

\*\* - model dependent, reach

Rack chassis sold separately (ref number. FR-16C-AC / FR-16C-DC)