



FM221, FM222, FS221/N, FS222/N FASTBUS Modules

The FASTBUS modules, FM221, FM222, FS221/N, and FS222/N are designed to enable distribution of SubDevices over long distances with a very low signal delay. The power supply integrated in the FASTBUS slave modules FS221/N and FS222/N can supply the I/O modules of a SubDevice. The flexible connector concept allows easy connection via a patch cable or an industrial grade push-pull plug-in connection via an adapter.

Features

- FASTBUS master modules with 1 or 2 FO interfaces
- FASTBUS slave modules with integrated power supply
- Up to 15 distributed SubDevices
- Connection technology via robust Harting PushPull® connector or LC patch cable
- Distances to 2000 m via multimode cable
- Minimal signal delay
- ColdClimate models (❄️)



Part type designation	Part number
FM221	00016747-10
FM221 CC	00018091-10
FM222	00016747-00
FM222 CC	00018091-00
FS221/N	00016749-10
FS221/N CC	00018092-10
FS222/N	00016749-00
FS222/N CC	00018092-00

FASTBUS

Screwable adapter ¹⁾ for using PushPull® connector:

Part type designation	Part number
Adapter ¹⁾	00016682-00

¹⁾ This adapter is required for PushPull® connectors. With screwed adapter no LC patch cord should be plugged, as this covers the LC-release lever and thus can not be removed.

Fx220 series

FASTBUS Interface		
Cable length	2000 m between the stations Total length max: 2300 m	
Transmission medium	Multimode fiber (50/125 µm and 62.5/125 µm) max. 2000 m FOC connector type LC FOC guide wavelength 1310 nm	
Max. number of stations	16 (max. 10 per line)	
Link budget	> 8 dB (3 dB reserve)	
Integrated power supply		
Input voltage	24 V DC (18 V to 34 V)	
Nominal power (Output)	18.25 W	
Output current at +5 V	3000 mA ¹⁾	
Output current at +15 V	250 mA ¹⁾	
Output current at -15 V	200 mA ¹⁾	
¹⁾ Total power must not exceed the specified nominal power (output)		
Diagnostics		
Fiber optics – received light output	HW: three-color status LED SW: 0 % to 100 %	
Approvals/Certificates		
General	CE, UKCA, cULus	
Marine	ABS, BV, DNV, KR, LR, NK, RINA	
Environmental conditions	Standard	ColdClimate (❄)
Operating temperature	-30 °C to +60 °C	
Relative humidity, operation	5 % to 95 % noncondensing	5 % to 95 % with condensation
Storage temperature	-40 °C to +85 °C	
Relative humidity, storage	5 % to 95 % with condensation	
Pollution degree (IEC 60664-1)	2 (noncondensing)	2

Order data

Part type designation	Part number	Description
FM221	00016747-10	FASTBUS master module with 1 FO interface; 50/62.5 µm Multimode; 2000 m; LC connector
FM221 CC	00018091-10	Like FM221; ColdClimate (❄)
FM222	00016747-00	FASTBUS master module with 2 FO interfaces; 50/62.5 µm Multimode; 2000 m; LC connector
FM222 CC	00018091-00	Like FM222; ColdClimate (❄)
FS221/N	00016749-10	FASTBUS slave module with 1 FO interface; 50/62.5 µm multi mode fiber; up to 2000 m; LC connector; integrated power supply 18.25 W
FS221/N CC	00018092-10	Like FS221/N; ColdClimate (❄)
FS222/N	00016749-00	FASTBUS slave module with 2 FO interfaces; 50/62.5 µm multi mode fiber; up to 2000 m; LC connector; integrated power supply 18.25 W
FS222/N CC	00018092-00	Like FS222/N; ColdClimate (❄)

Part type designation	Part number	Description
KZ 51/03 B	00012052-00	Terminal 03-pin pitch 5.08; cage clamp with labeling strips
PushPull® adapter	00016682-00	Adapter for Harting PushPull LC connector

Accessories ¹⁾

Part type designation	Part number	Manufacturer	Description
LC connector	SXLC-DK0-43-0010	LEONI AG	LC connector duplex uniboot multimode type 2 for multi-mode fibers with 125 µm outer diameter (minibreakout cable)
Harting connectors	09 57 402 0500 020	HARTING	HARTING PushPull LC duplex plastic Multi Mode SFP (breakout cable)
Harting connectors	09 57 409 0500 020	HARTING	HARTING PushPull LC duplex metal Multi Mode SFP (breakout cable)

¹⁾ Information without guarantee, order directly from the manufacturer

Cable recommendations ¹⁾

Part type designation	Part number	Manufacturer	Length	[m]	Description
LC patch cable	JUDNAAUXxc77AO0	LEONI AG	c = 0005	0.5	I-V(ZN)Y 2G50/125 TB900L 2.8 assembled Cable: 84950785G222 Side A: LC Side B: LC Operating and storage temperature -40 °C to +70 °C
			c = 001	1	
			c = 003	3	
			c = 005	5	
			c = 010	10	
			c = 030	30	

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