



FASTBUS

FM211, FM212, FS211/N, FS212/N FASTBUS Modules

The FASTBUS modules, FM211, FM212, FS211/N, and FS212/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 FS211/N and FS212/N can supply the I/O modules of a SubDevice.

Features

- FASTBUS master modules with 1 or 2 FO interfaces
- FASTBUS slave modules with 1 or 2 FO interfaces with integrated power supply
- Up to 15 distributed SubDevices
- Distances between 2 stations up to:
 - 40 m for POF cables
 - 150 m for HCS cables
 - 180 m for special HCS cables
- Status display (RUN/ERR) and display for fiber type
- Minimal signal delay

Part type designation	Part number
FM211	00017821-00
FM212	00017822-00
FS211/N	00017823-00
FS212/N	00017824-00

Fx210 series

FASTBUS Interface	
Cable length	40/150/180 m between the stations, total length max: 1000 m
Transmission medium	Plastic Optical Fiber (POF) max. 40 m (POF sometimes also referred to as PMMA) Hard Cladded Silica (HCS) max. 150 m (HCS sometimes also referred to as Plastic Silica Fiber (PCF)) Special HCS cable 180 m
Max. number of stations	16

Integrated power supply	
Input voltage	24 V DC (18 V to 34 V)
Current consumption	Max. 1.2 A at 24 V
Nominal power (Output)	17 W
Output current at +5 V	2800 mA ¹⁾
Output current at +15 V	250 mA ¹⁾
Output current at -15 V	200 mA ¹⁾
Galvanic isolation from the system	500 V
Reverse polarity protection	Yes

¹⁾ From KR120.000: Total power must not exceed the specified nominal power (output)

Approvals/Certificates	
General	CE, UKCA, cULus
Marine	ABS, BV, DNV, KR, LR, NK, RINA

Environmental conditions	
Operating temperature	0 °C to +60 °C
Relative humidity, operation	5 % to 95 % noncondensing
Storage temperature	-40 °C to +85 °C
Relative humidity, storage	5 % to 95 % noncondensing
Pollution degree (IEC 60664-1)	2 (noncondensing)

Order data

Part type designation	Part number	Description
FM211	00017821-00	FASTBUS master module with 1 FO interface; HCS/PCF 150 m or POF 40 m
FM212	00017822-00	FASTBUS master module with 2 FO interfaces; HCS/PCF 150 m or POF 40 m
FS211/N	00017823-00	FASTBUS slave module with 1 FO interface; HCS/PCF 150 m or POF 40 m; integrated power supply 17 W
FS212/N	00017824-00	FASTBUS slave module with 2 FO interfaces; HCS/PCF 150 m or POF 40 m; integrated power supply 17 W

Accessories

Part type designation	Part number	Description
LWLP1 connector	00009502-00	Connector for plastic fiber optic cable. 2-line
LWLP1 sleeve	00009514-00	Sleeve for plastic fiber optic cable per piece
LWLP polishing set	00009696-00	Polishing set for plastic fiber optic cable (HFBR-4593/Hewlett Packard)
LWLP-WKZ1	00010126-00	Skinning tool for plastic fiber optic cable Type RS
Fiber optic cable pliers1	00009695-00	BNC crimping pliers (Pressmaster DCC 1113)
K-LWLP1 0.5 m	00009624-02	POF Cable 0.5 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 1.0 m	00009624-00	POF Cable 1.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 2.0 m	00009624-01	POF Cable 2.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 3.0 m	00009624-06	POF Cable 3.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 5.0 m	00009624-04	POF Cable 5.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 7.0 m	00009624-11	POF Cable 7.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 10.0 m	00009624-03	POF Cable 10.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 15.0 m	00009624-07	POF Cable 15.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 20.0 m	00009624-05	POF Cable 20.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 30.0 m	00009624-12	POF Cable 30.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLP1 40.0 m	00009624-15	POF Cable 40.0 m duplex plastic optical fiber; Fx21x Fastbus
K-LWLH1 2.0 m	00010762-07	HCS Cable 2.0 m duplex 200 µm HCS fiber; Fx21x Fastbus
K-LWLH1 10.0 m	00010762-04	HCS Cable 10.0 m duplex 200 µm HCS fiber; Fx21x Fastbus
K-LWLH1 15.0 m	00010762-06	HCS Cable 15.0 m duplex 200 µm HCS fiber; Fx21x Fastbus
K-LWLH1 90.0 m	00010762-01	HCS Cable 90.0 m duplex 200 µm HCS fiber; Fx21x Fastbus
K-LWLH1 100.0 m	00010762-03	HCS Cable 100.0 m duplex 200 µm HCS fiber; Fx21x Fastbus
K-LWLH1 120.0 m	00010762-02	HCS Cable 120.0 m duplex 200 µm HCS fiber; Fx21x Fastbus
LWLH connector	00010949-00	Pin for HCS-Cable Type "Simplex" per piece
Fiber optic cable housing ZA	00011105-00	Housing LWL-HCS for left site (metal housing with screws)
Fiber optic cable housing ZB	00011622-00	Housing LWL-HCS for right site (metal housing with screws)
LWLH-WKZ-SET	00010952-00	Tool set for LWLH with cutter, skinning tool, crimp gripper, diamond cutter
LWLH/-Cap	00011188-00	Cap for transport protection of fiber connector housing
KZ 51/03 B	00012052-00	Terminal 03 pin spacing 5.08; cage clamps with labeling strips