

1G SFP Transceivers

AFL offer a comprehensive range of fibre and copper SFP (Small Form-factor Pluggable) transceivers for use in telecom and data communication networks. SFP's interface the electrical communication device to the physical cabling medium and are available in Ethernet or Fibre Channel and support data rates up to 1.25 Gbps (Ethernet). AFL SFP's include Digital Diagnostics Monitoring (DDM) which allows monitoring of parameters such as power, temperature and voltage.

Features

- Data rate up to 1.25 Gbps
- Up to 160 km transmission distance
- Operating case temperature: 0 to +70°C or industrial temperature rated version: -40 to +85°C
- Digital Diagnostic Monitoring

Applications

- Switch and router connectivity
- Media Conversion
- Gigabit Ethernet
- LAN and SAN connectivity
- Fibre Channel
- SONET/SDH Network

Specifications

PART NUMBER	OUTPUT POWER (DBM)		RECEIVE SENSITIVITY (DBM)	LINK BUDGET (DBM)	RECEIVE OVERLOAD (DBM)
	Min	Max			
SFP-85-1GE-0.55-C-D	-9.5	-3	-17	7.5	-3
SFP-31-1GE-10-C-D	-9	-3	-21	13	-3
SFP-31-1GE-20-C-D	-8	-3	-22	12	-3
SFP-31-1GE-40-C-D	-2	3	-24	19	-3
SFP-55-1GE-80-C-D	0	5	-24	24	-3
SFP-55-1GE-120-C-D	0	5	-32	32	-10
SFP-55-1GE-160-C-D	3	7	-37	40	-10

Ordering Information

PART NUMBER	DESCRIPTION
SFP-85-1GE-0.55-C-D	SFP 1000Base-SX, 850 nm, 1GE 550 m, -0°C - +70°C, DDM
SFP-31-1GE-10-C-D	SFP 1000Base-LX, 1310 nm, 1GE 10 km, -0°C - +70°C, DDM
SFP-31-1GE-20-C-D	SFP 1000Base-LX, 1310 nm, 1GE 20 km, -0°C - +70°C, DDM
SFP-31-1GE-40-C-D	SFP 1000Base-EX, 1310 nm, 1GE 40 km, -0°C - +70°C, DDM
SFP-55-1GE-80-C-D	SFP 1000Base-ZX, 1550 nm, 1GE 80 km, -0°C - +70°C, DDM
SFP-55-1GE-120-C-D	SFP 1000Base-EZX, 1550 nm, 1GE 120 km, -0°C - +70°C, DDM
SFP-55-1GE-160-C-D	SFP 1000Base-EZX, 1550 nm, 1GE 160 km, -0°C - +70°C, DDM

Contact AFL for vendor specific coded transceivers.
Industrial Temperature Rated (-40°C to +85°C) available.

Bidirectional SFP Transceivers

Bidirectional SFP transceivers operate in uplink and downlink pairs. Uplink SFP's transmit at 1310 nm and receive at 1490 nm while its paired downlink transmits at 1490 nm and receives at 1310 nm. Bidirectional SFP's are also available in 1310/1550 nm pairs. Bidirectional SFP's have a single interface and communicate bidirectionally over a single fibre.

Features

- Data rates up to 1.25 Gbps
- Up to 120 km transmission distance
- Digital Diagnostic Monitoring
- Operating case temperature range of 0°C to +70°C or industrial temperature rated -40°C to +85°C

Applications

- Switch and router connectivity
- Media Conversion
- Gigabit Ethernet
- LAN and SAN connectivity
- Fibre Channel
- SONET/SDH Network

Specifications

PART NUMBER	OUTPUT POWER (DBM)		RECEIVER SENSITIVITY (DBM)	LINK BUDGET (DBM)	RECEIVER OVERLOAD (DBM)
	Min	Max			
SFPB-3149-1GE-20-C-D / SFPB-4931-1GE-20-C-D	-8	-3	-22	14	-3
SFPB-3149-1GE-40-C-D / SFPB-4931-1GE-40-C-D	-5	0	-24	19	-3
SFPB-3149-1GE-60-C-D / SFPB-4931-1GE-60-C-D	0	+5	-27	27	-3
SFPB-3155-1GE-10-C-D / SFPB-5531-1GE-10-C-D	-9	-3	-21	12	-3
SFPB-3155-1GE-20-C-D / SFPB-5531-1GE-20-C-D	-8	-3	-22	14	-3
SFPB-3155-1GE-3-C-D / SFPB-5531-1GE-3-C-D	-14	-8	-22	8	-3
SFPB-3155-1GE-60-C-D / SFPB-5531-1GE-60-C-D	-3	2	-23	20	-3
SFPB-3149-1GE-10-C-D / SFPB-4931-1GE-10-C-D	-9	-3	-22	13	-3
SFPB-4955-1GE-80-C-D / SFPB-5549-1GE-80-C-D	0	+5	-26	26	-3

Ordering Information

PART NUMBER	DESCRIPTION
SFPB-3155-1GE-3-C-D	SFP BIDI 1000Base-BX-U, 1310/1550 nm, 1GE 3 km, -0°C - +70°C, DDM, SC
SFPB-5531-1GE-3-C-D	SFP BIDI 1000Base-BX-D, 1550/1310 nm, 1GE 3 km, -0°C - +70°C, DDM, SC
SFPB-3155-1GE-10-C-D	SFP BIDI 1000Base-BX-U, 1310/1550 nm, 1GE 10 km, -0°C - +70°C, DDM, SC
SFPB-5531-1GE-10-C-D	SFP BIDI 1000Base-BX-D, 1550/1310 nm, 1GE 10 km, -0°C - +70°C, DDM, SC
SFPB-3155-1GE-20-C-D	SFP BIDI 1000Base-BX-U, 1310/1550 nm, 1GE 20 km, -0°C - +70°C, DDM, SC
SFPB-5531-1GE-20-C-D	SFP BIDI 1000Base-BX-D, 1550/1310 nm, 1GE 20 km, -0°C - +70°C, DDM, SC
SFPB-3149-1GE-10-C-D	SFP BIDI 1000Base-BX-U, 1310/1490 nm, 1GE 10 km, -0°C - +70°C, DDM, SC
SFPB-4931-1GE-10-C-D	SFP BIDI 1000Base-BX-D, 1490/1310 nm, 1GE 10 km, -0°C - +70°C, DDM, SC
SFPB-3149-1GE-20-C-D	SFP BIDI 1000Base-BX-U, 1310/1490 nm, 1GE 20 km, -0°C - +70°C, DDM, SC
SFPB-4931-1GE-20-C-D	SFP BIDI 1000Base-BX-D, 1490/1310 nm, 1GE 20 km, -0°C - +70°C, DDM, SC
SFPB-3149-1GE-40-C-D	SFP BIDI 1000Base-BX-U, 1310/1490 nm, 1GE 40 km, -0°C - +70°C, DDM, SC
SFPB-4931-1GE-40-C-D	SFP BIDI 1000Base-BX-D, 1490/1310 nm, 1GE 40 km, -0°C - +70°C, DDM, SC
SFPB-3149-1GE-60-C-D	SFP BIDI 1000Base-BX-U, 1310/1490 nm, 1GE 60 km, -0°C - +70°C, DDM, SC
SFPB-4931-1GE-60-C-D	SFP BIDI 1000Base-BX-D, 1490/1310 nm, 1GE 60 km, -0°C - +70°C, DDM, SC
SFPB-3155-1GE-60-C-D	SFP BIDI 1000Base-BX-U, 1310/1550 nm, 1GE 60 km, -0°C - +70°C, DDM, SC
SFPB-5531-1GE-60-C-D	SFP BIDI 1000Base-BX-D, 1550/1310 nm, 1GE 60 km, -0°C - +70°C, DDM, SC
SFPB-4955-1GE-80-C-D	SFP BIDI 1000Base-BX-U 1490/1550 nm, 1GE, 80 km, -0°C - +70°C, DDM, SC
SFPB-5549-1GE-80-C-D	SFP BIDI 1000Base-BX-D 1550/1490 nm, 1GE, 80 km, -0°C - +70°C, DDM, SC

Contact AFL for vendor specific coded transceivers. SC connector supplied as standard, LC connector optional. Industrial Temperature Rated (-40°C to +85°C) available.

Copper SFP

AFL copper SFP's comply with Gigabit Ethernet and 1000Base-T standards as specified in IEEE 802.3-2002 and IEEE 802.3ab, supporting 1000 Mbps data rate up to 100 meters reach over unshielded twisted-pair category 6 cable.

Features

- Up to 1.25 Gbps bidirectional data links
- Hot-pluggable SFP footprint
- Fully metallic enclosure for low EMI
- Access to physical layer IC via 2-wire serial bus
- 1000 Base-T operation in host systems with SERDES interface
- 10/100/1000 Mbps compliant in host systems with SGMII interface
- Operating case temperature range of 0°C to +70°C (Commercial) or -40°C to +85°C (Industrial)

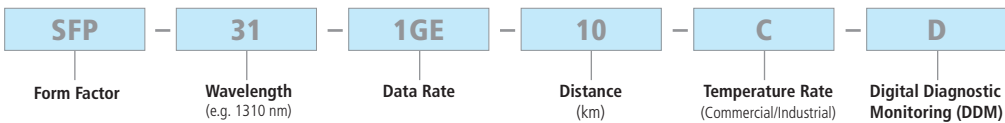
Applications

- Switch and router connectivity
- Media Conversion
- Gigabit Ethernet
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- Fibre Channel
- SONET/SDH Network

Specifications

PARAMETER	TYPICAL
Line Frequency (MHz)	125
Tx Output Impedance (Ohm)	100
Rx Input Impedance (Ohm)	100

Ordering Information



PART NUMBER	DESCRIPTION
SFP-T-1GE	SFP Copper, 1000 Base-T 1000 Mbps, -0°C - +70°C
SFP-T-M1GE	SFP Copper, 10/100/1000, Base-T, 10/100/1000 Mbps, -0°C - +70°C

Industrial Temperature Rated (-40°C to +85°C) available.