

# SFP Modules

## Small Form-Factor Pluggable SFP SFP+ and XFP Modules



### Features

- Industrial standard small form-factor pluggable (SFP) package
- Wide specifications and fiber types available
- Provides digital diagnostics monitoring (DDM) functionality
- Comes with metal enclosure for EMI
- The Class 1 laser product complies with EN 60825-1
- Supports plug-n-play operation

### Introduction

Advantech's small form-factor pluggable (SFP) transceiver family is available with a variety of types of copper SFP and fiber SFPs, SFP+, and XFP. This transceiver module is compliant with the small form-factor pluggable (SFP) multi-source agreement (MSA). They are versatile and widely used because of their hot-pluggable feature.

Advantech's SFPs provide robust industrial performance with an extended operating temperature range. Through real-time monitoring, the DDM (digital diagnostic monitoring) functionality provides users critical information such as receive optical power, transmitted optical power, laser bias current, input voltage, and temperature in the network. This approach enables better fault isolation and error detection.

### Ordering Information

#### Industrial Grade 1.25 Gbps SFP Modules w/ DDM

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-GMM-550	808-38201	850 nm	Multi-mode	550 m	LC	-17	-40 to +85 °C (-40 to +185 °F)
SFP-GMM-2K	808-38206	1310 nm	Multi-mode	2 km	LC	-19	
SFP-GSM-20K	808-38200	1310 nm	Single-mode	20 km	LC	-23	
SFP-GSM-30K	808-38203	1310 nm	Single-mode	30 km	LC	-24	
SFP-GSM-40K	808-38204	1550 nm	Single-mode	40 km	LC	-24	
SFP-GSS-40KTX-LC	808-38723	1310T/1550R	Single-Strand	40 km	LC	-23	
SFP-GSS-40KRX-LC	808-38724	1550T/1310R	Single-Strand	40 km	LC	-23	
SFP-GS4-70KTX-LC	808-38725	1490T/1550R	Single-Strand	70 km	LC	-24	
SFP-GS4-70KRX-LC	808-38726	1550T/1490R	Single-Strand	70 km	LC	-24	
SFP-GSS-20KTX	808-38221	1310T/1550R	Single-Strand	20 km	SC	-23	
SFP-GSS-20KRX	808-38222	1550T/1310R	Single-Strand	20 km	SC	-23	
SFP-GSS-40KTX	808-38223	1310T/1550R	Single-Strand	40 km	SC	-23	
SFP-GSS-40KRX	808-38224	1550T/1310R	Single-Strand	40 km	SC	-23	
SFP-GS4-70KTX	808-38289	1490T/1550R	Single-Strand	70 km	SC	-24	
SFP-GS4-70KRX	808-38290	1550T/1490R	Single-Strand	70 km	SC	-24	

#### Industrial Grade 1.25 Gbps SFP Modules

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-GSX/LCI-AE	-	850 nm	Multi-mode	550 m	LC	-17	-20 to +85 °C (-20 to +185 °F)
SFP-GLX/LCI-10E	-	1310 nm	Single-mode	10 km	LC	-20	
SFP-GLX/LCI-20E	-	1310 nm	Single-mode	20 km	LC	-23	-40 to +85 °C (-40 to +185 °F)
SFP-GLX/LCI-40E	-	1310 nm	Single-mode	40 km	LC	-23	
SFP-GXD/LCI-50E	-	1550 nm	Single-mode	50 km	LC	-23	
SFP-GZX/LCI-70E	-	1550 nm	Single-mode	70 km	LC	-24	
SFP-GZX/LCI-110E	-	1550 nm	Single-mode	110 km	LC	-30	

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### 1.25 Gbps SFP Modules

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-GSX/LC-AE	-	850 nm	Multi-mode	550 m	LC	-17	0 to +70 °C (+32 to +158 °F)
SFP-GLX/LC-10E	-	1310 nm	Single-mode	10 km	LC	-20	
SFP-GLX/LC-20E	-	1310 nm	Single-mode	20 km	LC	-23	
SFP-GLX/LC-40E	-	1310 nm	Single-mode	40 km	LC	-23	
SFP-GXD/LC-50E	-	1550 nm	Single-mode	50 km	LC	-23	
SFP-GZX/LC-70E	-	1550 nm	Single-mode	70 km	LC	-24	
SFP-GZX/LC-110E	-	1550 nm	Single-mode	110 km	LC	-30	

### Industrial Grade 100-155 Mbps SFP Modules w/ DDM

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-FMM850-2K	808-38101	850 nm	Multi-mode	2 km	LC	-26	-40 to +85 °C (-40 to +185 °F)
SFP-FMM-2K	808-38102	1300 nm	Multi-mode	2 km	LC	-32	
SFP-FSM-20K	808-38103	1310 nm	Single-mode	20 km	LC	-35	
SFP-FSM-40K	808-38104	1310 nm	Single-mode	40 km	LC	-36	
SFP-FSM-80K	808-38105	1550 nm	Single-mode	80 km	LC	-36	
SFP-FSS-20KTX	808-38121	1310T/1550R	Single-Strand	20 km	SC	-32	
SFP-FSS-20KRX	808-38122	1550T/1310R	Single-Strand	20 km	SC	-32	
SFP-FSS-40KTX	808-38123	1310T/1550R	Single-Strand	40 km	SC	-34	
SFP-FSS-40KRX	808-38124	1550T/1310R	Single-Strand	40 km	SC	-34	

### Industrial Grade 100-155 Mbps SFP Modules

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-FXM/LCI-AE	-	1310 nm	Multi-mode	2 km	LC	-32	-40 to +85 °C (-40 to +185 °F)
SFP-FXS/LCI-30E	-	1310 nm	Single-mode	30km	LC	-34	

### 100-155 Mbps SFP Modules

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-FXM/LC-AE	-	1310 nm	Multi-mode	2 km	LC	-32	0 to +70 °C (+32 to +158 °F)
SFP-FXS/LC-30E	-	1310 nm	Single-mode	30km	LC	-34	

### Industrial Grade SFP+ 10 Gbps Modules w/ DDM

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-XMM-33	808-38600	850 nm	Multi-mode	33 m	LC	-9.9	-10 to +70 °C (+14 to +158 °F)
SFP-XSM-10K	808-38601	1310 nm	Single-mode	10 km	LC	-14.4	
SFP-XMM-LCI-400	-	850nm	Multi-mode	400 m	LC	-11.1	-40 to +85 °C (-40 to +185 °F)
SFP-XSM-LCI-10K	-	1310nm	Single-mode	10 km	LC	-12.6	
SFP-XSM-LCI-20K	-	1310nm	Single-mode	20 km	LC	-12.6	
SFP-XSM-LCI-40K	-	1310nm	Single-mode	40 km	LC	-12.6	
SFP-XSM-LCI-80K	-	1550nm	Single-mode	80 km	LC	-23	

### SFP+ 10 Gbps Modules w/DDM

Part Number	As know as	Wavelength	Optical Mode	Distance	Connector	Sensitivity (dB)	Operating Temp.
SFP-XMM-LC-400	-	850nm	Multi-mode	400 m	LC	-11.1	0 to +70 °C (+32 to +158 °F)
SFP-XSM-LC-10K	-	1310nm	Single-mode	10 km	LC	-12.6	
SFP-XSM-LC-20K	-	1310nm	Single-mode	20 km	LC	-12.6	
SFP-XSM-LC-40K	-	1310nm	Single-mode	40 km	LC	-12.6	
SFP-XSM-LC-80K	-	1550nm	Single-mode	80 km	LC	-23	
SFP-XSS-10KTX-LC	-	1270T/1330R	Single-mode	10 km	LC	-15.5	
SFP-XSS-10KRX-LC	-	1330T/1270R	Single-mode	10 km	LC	-15.5	
SFP-XSS-40KTX-LC	-	1270T/1330R	Single-mode	40 km	LC	-15.5	
SFP-XSS-40KRX-LC	-	1330T/1270R	Single-mode	40 km	LC	-15.5	

## SFP Modules

### Industrial Grade XFP 10 Gbps Modules w/ DDM

Part Number	Also Known As	Wavelength	Optical Mode	Distance	Optical Connector	Sensitivity (dB)	Operating Temp.
SFP-XMM-33-XFP	808-38610	850 nm	Multi-mode	33 m	LC	-9.9	0 to +70 °C (+32 to +158 °F)
SFP-XSM-10K-XFP	808-38611	1310 nm	Single-mode	10 km	LC	-14.4	
SFP-XSM-40K-XFP	808-38612	1550 nm	Single-mode	40 km	LC	-16	
SFP-XSM-80K-XFP	808-38613	1550 nm	Single-mode	80 km	LC	-23	

### Industrial Grade SFP 1Gbps / SFP+ 10Gbps copper Modules

Part Number	Also Known As	Ethernet Speed	Distance	Operating Temp
SFP-GTX	808-39001	10/100/1000 Mbps	100 m	-40 to +85 °C (-40 to +185 °F)
SFP-GTXB	808-39010	1000 Mbps	100 m	0 to +70 °C (+32 to +158 °F)
SFP-GTX/RJ45I-AE	-	1000 Mbps	100 m	-40 to +85 °C (-40 to +185 °F)
SFP-10GTX	-	10G Mbps	100 m	0 to +70 °C (+32 to +158 °F)