

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 | |

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 | |
| SFP-GWDM13SC-40E | - | 1310T/1550R | Single-Strand | 40 km | LC | -23 | |
| SFP-GWDM15SC-40E | - | 1550T/1310R | Single-Strand | 40 km | LC | -23 | |

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 | 1310 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 | |

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 1 Gbps Copper Modules

| Part Number | Also Known As | Ethernet Speed | Distance | Operating Temp. |
|------------------|---------------|------------------|----------|--------------------------------|
| SFP-GTX | 808-39001 | 10/100/1000 Mbps | 100 m | 0 to +70 °C (+32 to +158 °F) |
| SFP-GTXB | 808-39010 | 1000 Mbps | 100 m | 0 to +70 °C (+32 to +158 °F) |
| SFP-GTX/RJ45J-AE | - | 1000 Mbps | 100 m | -40 to +85 °C (-40 to +185 °F) |

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