

### Applications:

- Modular network connections for all RHINOs and IPCoax Ethernet Switches
- Fiber to the Home
- Metro Ethernet Business Services Delivery
- IP Video camera data transport
- GigE campus connections
- Environmentally hardened IT Networking

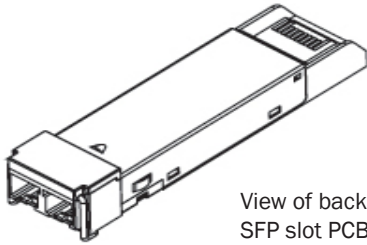
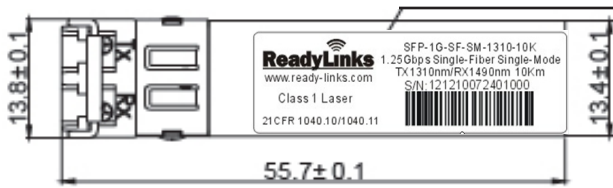
### Key Highlights:

- Simple Plug and Play installation
- 1 Gbps and 100Mbps interfaces
- Single Mode, single fiber or dual fiber
- Multimode dual fiber
- LC optical connectors
- Copper SFP available
- Easy to read labels



Small Form-factor Pluggable optical modules provide flexible Ethernet networking and IP data transport over single fiber, dual fiber or copper media. The SFPs install easily in the RHINO or IPCoax SFP slots, and can be mixed and matched depending on the application networking requirements.

SFP Module	Description	Catalog Number
GigE Single Fiber 1550TX 1km	Gigabit SFP Single Fiber Single Mode 1550nmTX/1310nmRX 1km	SFP-1G-SF-SM-1550-1k
GigE Single Fiber 1310TX 1km	Gigabit SFP Single Fiber Single Mode 1310nmTX/1550nmRX 1km	SFP-1G-SF-SM-1310-1k
GigE Single Fiber 1550TX 10km	Gigabit SFP Single Fiber Single Mode 1550nmTX/1310nmRX 10km	SFP-1G-SF-SM-1550-10k
GigE Single Fiber 1310TX 10km	Gigabit SFP Single Fiber Single Mode 1310nmTX/1550nmRX 10km	SFP-1G-SF-SM-1310-10k
GigE Single Fiber 1550TX 20km	Gigabit SFP Single Fiber Single Mode 1550nmTX/1310nmRX 20km	SFP-1G-SF-SM-1550-20k
GigE Single Fiber 1310TX 20km	Gigabit SFP Single Fiber Single Mode 1310nmTX/1550nmRX 1km	SFP-1G-SF-SM-1310-20k
GigE Dual Fiber 1310TX 10km	Gigabit SFP Dual Fiber Single Mode 1310nmTX, 1310nmRX 10km	SFP-1G-DF-SM-1310-10k
GigE Dual Fiber 1310TX 20km	Gigabit SFP Dual Fiber Single Mode 1310nmTX, 1310nmRX 20km	SFP-1G-DF-SM-1310-20k
GigE Dual Fiber 1310TX 40km	Gigabit SFP Dual Fiber Single Mode 1310nmTX, 1310nmRX 40km	SFP-1G-DF-SM-1310-40k
GigE Dual Fiber 1550TX 80km	Gigabit SFP Dual Fiber Single Mode 1550nmTX, 1550nmRX 80km	SFP-1G-DF-SM-1550-80k
GigE SFP Multimode fiber	Gigabit SFP Dual Fiber Multimode 850nm, 550 meter range	SFP-1G-DR-MM-850-550
GigE SFP Copper	Gigabit Copper SFP, RJ-45, 100 meters	SFP-1G-CU-100
100M SFP Single Fiber 1490TX 10km	100Mbps SFP Single Fiber Single Mode 1490nm Tx/1310nm Rx, 10Km	SFP-100-SF-SM-1490-10K
100M SFP Single Fiber 1310TX 10km	100Mbps SFP Single Fiber Single Mode 1310nm Tx/1490nm Rx, 10Km	SFP-100-SF-SM-1310-10K
100M SFP Single Fiber 1490TX 20km	100Mbps SFP Single Fiber Single Mode 1490nm Tx/1310nm Rx, 20Km	SFP-100-SF-SM-1490-20K
100M SFP Single Fiber 1310TX 20km	100Mbps SFP Single Fiber Single Mode 1310nmTx/1490nm Rx, 20Km	SFP-100-SF-SM-1310-20K
100M SFP Dual Fiber 1310TX 10km	100Mbps SFP Dual Fiber Single Mode 1310nmTX, 1310nmRX, 10Km	SFP-100-DF-SM-1310-10K
100M SFP Dual Fiber 1310TX 20km	100Mbps SFP Dual Fiber Single Mode 1310nmTX, 1310nmRX, 20Km	SFP-100-DF-SM-1310-20K
100M SFP Dual Fiber 1310TX 40km	100Mbps SFP Dual Fiber Single Mode 1310nmTX, 1310nmRX, 40Km	SFP-100-DF-SM-1310-40K
100M SFP Dual Fiber 1550TX 80km	100Mbps SFP Dual Fiber Single Mode 1550nmTX, 1550nmRX, 80Km	SFP-100-DF-SM-1550-80K
100M SFP Dual Fiber Multimode	100Mbps SFP Dual Fiber Multimode 850nmTx, 850nmRX, 550 meters	SFP-100-DF-MM-850-550

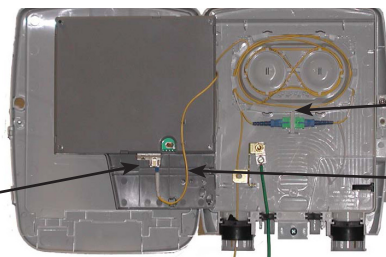


View of back showing SFP slot PCB connector

The SFP Labels indicate the following information: Transport speed, number of fibers, mode of fiber, transmit wavelength, receive wavelength and optical range. The serial number is used by ReadyLinks for production processing and tracking.

SFPs are Class 1 laser devices and should be handled with care. Always shield your eyes from the output of this laser.

SFPs are inserted in the two slots on the underside of the RHINO or in the front of the GTO-R or IPcoax 2400



Fiber enters the RHINO and can be spliced or connected in a bulkhead adapter to optical patch cords with LC connectors that plug into the SFPs.



Typical SFP Specifications	
<b>Environmental and Operating Specifications</b>	
Operating Temperature	-40° C to 85° C
Data Rates	1.25Gbps or 100Mbps
Output Optical Eye	IEEE 802.3z
Optical Launch Power, Receiver Sensitivity and Jitter	Varies by SFP type
SFP Optical Connector	LC - single fiber or dual fiber depending on application
<b>Compatibility and Related Documents</b>	
RoHS	Compliant with RoHS directive
SFP Multi Source Agreement	ReadyLinks SFPs are compatible with the industry standard SFP MSA which details the specifications of pluggable fiber optic transceiver modules that support Fast Ethernet and Gigabit Ethernet along with other types of optical transport.
<b>Mechanical Specifications</b>	
Dimensions	13.8mm wide x 12.2mm high x 55.7mm long

Note: specifications are subject to change. v1.1.

If additional technical specifications are required, please contact ReadyLinks Technical Support Group