Signal Repeater

Features

- Retimes and regenerates signal
- 100 km+ link distance over multiple hops
- Virtually unlimited LAN expansion
- Connect Multimode to Multimode
- Connect Multimode to Singlemode
- Dual or Single Fiber input and output
- Hot swappable
- SNMP managed
- Compatible with all the appropriat protocol standards
- Fits in all Fiber Driver chassis

Overview
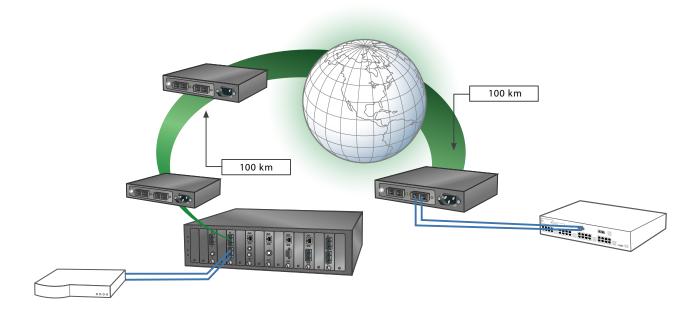
The Fiber Driver™ family provides some of the longest link distances in the industry. However, some networks require greater than 100 kilometer links. For these situations, the Fiber Driver family has a selection of signal repeaters. These devices retime and regenerate the transmission signal so multiple long hops are possible. They can repeat the signal from Multimode fibers to Multimode fibers, from Multimode to Singlemode, or from Singlemode to Singlemode, and in any combination of Dual fibers and Single fibers. Switch- based repeaters allow for multiple repeaters to be daisy-chained, depending on speed and protocol. There are many possible combinations and the main options are shown below. A complete list of repeaters is available from your sales representative.

For additional information including pricing and availability, contact your MRV Communications sales representative today.

LAN Extention Using Fiber Driver Signal Repeater

100 km

100 km

Datasheet

Physical Specifications: Signal Repeaters

Operating Temperature Range:	0°C to 50°C (32°F to 122°F)
Storage Temperature:	-10°C to 65°C (-14°F to 149°F)
Relative Humidity:	85% maximum, non-condensing
Physical Dimensions:	25 mm x 75 mm x 175 mm deep (1" x 3" x 7" deep)
Weight:	120 - 240 g (4.2 - 8.5 oz) depending on configuration
Emission Compliance:	FCC - PART 15, SUBPART B, 1999, CLASS A; CE MARK - EN 50081-1:1992;
	EN 50082:1997; EN 55024:1998; EN 55022:1998; AS/NZS 3548:1995

FAST ETHERNET REPEATERS

	Part Number	Function	Protocol	Connectors* Port/Link	Wavelength Input/Output (nm)
Ordering Info	EM316FRDM/DSx**	Dual MM to Dual SM Repeater	Fast Ethernet	DSC/DSC	1310 / 1310 or 1550
	EM316FRDM/SSx**	Dual MM to Sigle Fiber SM Repeater	Fast Ethernet	DSC/SC-APC	1310 / 1310 or 1550
	EM316FRDSx/DSx**	Dual SM to Dual SM Repeater	Fast Ethernet	DSC/DSC	1310 / 1550
	EM316FRSSx/SSx**	Single Fiber SM to Single Fiber SM Repeater	Fast Ethernet	SC-APC/SC-APC	1310 or 1550 / 1310 or 1550

Fast Ethernet Dual Fiber	Minimum Loss Budget (dB)	Range** Approx. (km)
S1	17	0 - 35
S2	24	25 - 45
S3	24	35 - 90
S4	29	40 - 110

Fast Ethernet Single Fiber	Minimum Loss Budget (dB)	Range** Approx. (km)
S2	18	0 - 35
S3	18	25 - 70
S4	24	35 - 100

GIGABIT ETHERNET REPEATERS

	Part Number	Function	Protocol	Connectors* Port/Link	Wavelength Input/Output (nm)
Ordering Info	EM316GRDM/DSx**	Dual MM to Dual SM Repeater	Gigabit Ethernet	DSC/DSC	850 / 1310 or 1550
	EM316GRDM/SSx**	Dual MM to Single Fiber SM Repeater	Gigabit Ethernet	DSC/SC-APC	850 / 1310 or 1550
	EM316GRDLX/DSx**	Dual MM LX to Dual SM Repeater	Gigabit Ethernet	DSC/DSC	1310 / 1310 or 1550
	EM316GRDLX/SSx**	Dual MM LX to Single Fiber SM Repeater	Gigabit Ethernet	DSC/SC-APC	1310 / 1310 or 1550
	EM316GRDSx**/DSx**	Dual SM to Dual SM Repeater	Gigabit Ethernet	DSC/DSC	1310 / 1310 or 1550
	EM316GRDS1/SSx**	Dual SM to Single Fiber SM Repeater	Gigabit Ethernet	DSC/SC-APC	1310 / 1310 or 1550
	EM316GRSSx**/SSx**	Single Fiber SM to Single Fiber SM Repeater	Gigabit Ethernet	SC-APC/SC-APC	1310 or 1550 / 1310 or 1550

Gigabit Ethernet Dual Fiber	Minimum Loss Budget (dB)	Range** Approx. (km)
S1	DL	0 - 10
S2	8	0 - 30
S3	15	15 - 60
S4	20	35 - 80

Gigabit Ethernet Single Fiber	Minimum Loss Budget (dB)	Range** Approx. (km)
S2	9	0 - 35
S3	12	10 - 50
S4	15	15 - 60

*Default connectors listed, DST optional.
**x = distance specification (i.e., can be S1, S2, S3, S4) depending on optical power; see table below. Distances are approximate and assume 9μ SM.
DL - Dispersion Limited

ATM OC-3 PEPEATERS

Part Number	Function	Protocol	Connectors* Port/Link	Wavelength Input/Output (nm)	Minimum Loss Budget (dB)	Range** Approx. (km)
EM316O3F/S1	MM to SM	ATM OC-3	DSC/DSC	1310 / 1310	17	0 - 35
EM316O3F/S2	MM to SM	ATM OC-3	DSC/DSC	1310 / 1310	24	25 - 45
EM316O3F/S3	MM to SM	ATM OC-3	DSC/DSC	1310 / 1550	24	35 - 90
EM316O3F/S4	MM to SM	ATM OC-3	DSC/DSC	1310 / 1550	29	40 - 110
EM316O3FSF/S2	SONET OC3 MM to Single Fiber SM	OC-3	DSC/SC-APC	1310 / 1310	18	0 - 35
EM316O3FSF/S3	SONET OC3 MM to Single Fiber SM	OC-3	DSC/SC-APC	1310 / 1550	18	25 - 70
EM316O3FSF/S4	SONET OC3 MM to Single Fiber SM	OC-3	DSC/SC-APC	1310 / 1550	24	35 - 100

Ordering Info

*Default connectors listed, DST optional.
**Distances are approximate and assume 9μ SM and 62.5μ MM.

MRV has more than 50 offices throughout the world. Addresses, phone numbers, and fax numbers are listed at www.mrv.com.
Please e-mail us at **sales@mrv.com** or call us for assistance.

The Power to Manage Your Fiber