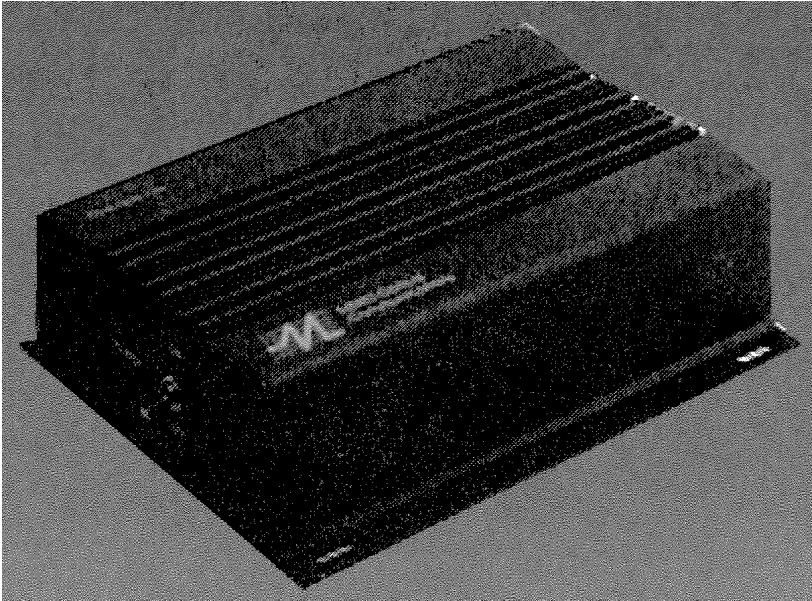




AM Fiber Optics AM Fiber Optic Receiver



The Meret FybrNode™ FR-1 fiber optic receiver converts lightwave signals to AM modulation RF signals in the 10 to 550 MHz range and digital signals from 550 to 750 MHz. When operated with any of the Meret FybrNode™ family of optical transmitters, this versatile receiver provides high quality, reliable lightwave conversion to RF. The FybrNode™ FR-1 receiver is suitable for a wide range of AM applications, including cable television, CCTV system interconnection, broadband networks, surveillance and security systems where high quality AM transmission is desired.

The FybrNode™ FR-1 receiver has been designed for simplicity of installation and operation. No expensive optical test equipment is required. The input is connectorized, eliminating the need to splice to a system fiber. There are no operating adjustments, reducing the time required for installation.

The FybrNode™ FR-1 receiver PIN photodetector is complementary to all FybrNode™ transmitters. Critical attention to circuit design and layout allow the FybrNode™ FR-1 receiver to provide excellent performance over the entire frequency band. The RF output signal is optimized for interface directly into a small distribution system. In a larger system, the output is an efficient match into an RF amplifier.

A 19" rack mount option is available for the FybrNode™ FR-1 receiver (FR-1R) allowing system integration into existing or new rack assemblies.

As an additional option, the FybrNode™ FR-1R receiver is available with a factory mounted high output level amplifier (FR-1RA).

FybrNode™ FR-1 Receiver

APPLICATIONS

- CATV
- CCTV
- Campus networks
- Surveillance
- Distance learning

FEATURES

- 750 MHz bandwidth
- Up to 80 AM channels per fiber
- High performance PIN diode detector
- Rack mount option
- Simple installation
- High output level option

BENEFITS

- Present and future compatibility
- No compromise in performance
- No tedious installation
- Plug and play

Specifications

Optical Input

Input Wavelength	1300 nm
Receiver Type	PIN detector
Input level	-5 dBm, ± 2dB
Connector	Type FC/PC
Connector Loss	>0.5 dB

RF Output

Bandwidth	10 to 750 MHz
Impedance	75 ohms, unbalanced
Return Loss	> 16 dB
Output level	+20 dBmV/channel ±1 dB at rated input
Tilt	Flat
Connector	Type F

High RF Output Level Option

Bandwidth	10 to 750 MHz
Impedance	75 ohms, unbalanced
Return Loss	>16 dB
Output Level	+40 dBmV/channel minimum
Tilt	Flat
Connector	Type F

Electrical/Mechanical

Power	100-120 VAC, 60 Hz, 7 Watts 200-240 VAC, 50 Hz, optional
Operating Range	0 to +50° C
Size	19"W x 3.5"H x 10"D 483mm x 89mm x 254mm
Weight	4 lb; 1.8 kg

FybrNode™ System Performance

Channel Loading	80 AM channels, with FybrNode™ 80 Transmitter
Path Length	10 dB
C/N Ratio	>50 dB
CTB	-63 dBc
XMod	-63 dBc
CSO	-60 dBc
RF Flatness	2 dB max

Channel Loading	60 AM channels with FybrNode™ 60 Transmitter
Path Length	10 dB
C/N Ratio	>50 dB
CTB	-63 dBc
XMod	-63 dBc
CSO	-60 dBc
RF Flatness	2 dB max

Specifications are subject to change without notice.