



The 2406LR is a fiber optic receiver for signals in the satellite L-Band and other frequency ranges. It accepts a single fiber optic input on an FCAPC connector and provides a pair of equal power electrical outputs. Packaged in a small, standalone enclosure, the 2406LR is temperature-hardened and ideal for mounting on or near antenna structures, or in any application where modular/rack-mount products are not practical. The -WP version features dust and water protection for direct outdoor mounting without a secondary enclosure. When combined with the 2408LT a bi-directional link can be created, ideal for VSAT and similar applications.

Two gain modes are provided for flexible output level adjustment to suit the requirements of the coaxial distribution system and the connected equipment. Manual gain mode allows a fixed gain level to be applied to the output signal. AGC mode allows the user to set a target output level, and the 2406LR's microprocessor will automatically apply the correct amount of gain to maintain that level. Comprehensive local LED indicators provide instant information relating to optical input, DC power input and RF output levels.

Features

- Mounts directly to the antenna structure or other outdoor locations
- -WP option provides a weatherproof version of the product
- Wide bandwidth allows use with L-Band, over-the-air DTV and other frequency ranges
- Protocol independent design – passes all modulation formats
- Dual, full power outputs
- Tri-color LED status indicators for optical input, DC input and RF output levels
- Flexible powering options including power brick (+PS option), 2400PSU-8 or customer's own 11-20V DC source
- Fiber link provides electrical isolation between antenna and facility, mitigating ground loop and lightning issues
- Fiber transport offers increased signal quality over coax at longer distances and is not prone to high-frequency rolloff
- **Applications**
- L-Band over fiber transport to L-Band upconverter for uplinks
- VSAT and other bi-directional signals
- Portable antenna deployment
- Any RF fiber receive application requiring a standalone device

Specifications

RF Outputs	
Number of Outputs	2
Connector	F-Type (50Ω BNC optional)
Conductor Range	23-18 AWG (0.26-0.82 mm ²)
I/O Impedance	75Ω (50Ω optional)
Frequency Range	
2406LR	120MHz - 3GHz
2406LR-H	120MHz - 2.3GHz
Return Loss	120MHz to 2.3GHz > 15dB 2.3GHz to 3GHz > 12dB
Output IP3	+28dBm
IMD	< -55dBc at -3dBm output and 25dB gain
Output Signal Level	
Manual Gain	0 to -60dBm (depending on input signal level, gain setting and optical loss)
AGC Mode	-10 to -40dBm (adjustable, maintainable within available gain range)
Available Gain	-6dB to +24dB in 2dB steps
Optical Input	
Number of Inputs	1
Connector	Female FC/APC
Operating Wavelength	1270nm-1610nm
Maximum Input Power	
2406LR	+3dBm
2406LR-H	-7dBm
Optical Sensitivity	
2406LR	-14dBm @ 35dB C/N on a 36MHz carrier
2406LR-H	-20dBm @ 35dB C/N on a 36MHz carrier
DC Input	
Voltage	+18V DC nominal, +11V DC to +20V DC range
Connector	F-Type
Conductor Range	23-18 AWG (0.26-0.82 mm ²)
Physical	
Dimensions	5.4"L x 2.4"W x 1.2"H (with flanges) (138mm L x 61mm W x 31mm H)
Environmental	
Temperature	-20 to +70°C
Dust and Water Protection	IP65 compliant (-WP version only)

