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 FC/APC connector and provides a pair of equal power electrical outputs. Packaged in a small, standalone enclosure, the 2406LR is temperaturehardened 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 LFD indicators provide instant information relating to optical input, DC power input and RF output levels.

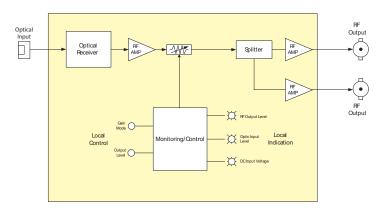
For GPS applications, 2406LR-5V-B50 can be used to power-up GPS antenna with 5V supply and transport GPS signals over fiber when combined with 2408LT13-5V-B50 transmitter.

#### Features & Benefits

- 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 roll-off

## **Applications**

- L–Band over Fiber Transport to L–Band up–converter for uplinks
- VSAT and other bi-directional signals
- Portable antenna deployment
- Any RF fiber receive application requiring a standalone device
- GPS antenna systems





# ▶ Specifications

RF Outputs: Number of Outputs:

Connector: F-Type (50Ω BNC optional) -18 AWG (0.26-0.82 mm<sup>2</sup>) Conductor Range: I/O Impedance:  $75\Omega$  (50 $\Omega$  optional)

Frequency Range: 2406LR: 2406LR-H:

120MHz-3GHz 120MHz-2.3GHz Return Loss: 120MHz to 2.3GHz: > 15dB

Output IP3: +28dBm

Output Signal Level: Manual Gain:

2.3GHz to 3GHz: > 12dB

< -55dBc at -3dBm output and 25dB 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)

-6dB to +24dB in 2dB steps

Available Gain: Optical Input: Number of Inputs:

Connector: Female FC/APC Operating Wavelength: 1270nm-1610nm

Maximum Input Power 2406LR: +3dBm

2406LR-H: -7dBm Optical Sensitivity:

-14dBm @ 35dB C/N on . 2406LR:

a 36MHz carrier 2406LR-H: -20dBm @ 35dB C/N on a 36MHz carrier

DC Input:

Voltage: 2406LR-5V-B50: 4.8-5.2V DC (range must be supplied by a regulated 5V source) Other 2406LR models: +18VDC nominal, +11V DC

to +20V DC range Connector: F-Type

23-18 AWG (0.26-0.82 mm<sup>2</sup>) Conductor Range:

Physical:

Dimensions (with flanges)

5 4"I x 2 4"W x 1 2"H (138mm L x 61mm W x 31mm H)

Environmental:

Temperature: -20 to +70°C Dust and Water Protection:

IP65 compliant (-WP version only)

# Ordering Information

2406LR-B50 2406LR-WP 2406LR-B50-WP 2406LR-H

2406LR-H-B50

2406LR-H-WP

2406LR-H-B50-WP

2406LR

L-Band/Wideband standalone fiber receiver

L-Band/Wideband standalone fiber receiver, 50Ω BNC connectors -Band/Wideband standalone/weatherproof fiber received

L-Band/Wideband standalone/weatherproof fiber receiver. 50Ω BNC connectors

L-Band/Wideband standalone fiber high-sensitivity receiver L-Band/Wideband standalone fiber high-sensitivity receiver

50Ω BNC connectors

L-Band/Wideband standalone/weatherproof fiber

high-sensitivity receiver

L-Band/Wideband standalone/weatherproof fiber high-sensitivity receiver, 50Ω BNC connectors

2406LR-5V-B50

L-Band Standalone/Weatherproof Fiber Receiver, standard sensitivity optical input, attenuated output for low power signal applications, 5V DC ± 0.2V DC power input, 50ΩBNC Connectors

#### Notes

- $75\Omega$  F–Type connectors are standard
- For eight-output power supply, see 2400PSU-8
- For companion transmitters, see 2408LT, 7708LT, 7708LT-2 and 7706LT
- For integrated solution with enclosure, see 2400ODU

### **Ordering Options**

+PS

18V DC external power supply brick, 100V-240V AC auto-ranging input, indoor mounting with F-Type connector