

2400ODU-8

Outdoor Integrated RF Fiber Transmission System

The 2400ODU-8 is a compact, IP65 rated weatherproof enclosure that provides a convenient, pre-integrated package for fiber transport of satellite and other signals within the extended L-Band range. The 2400ODU-8 can house up to 8x active fiber transmit (2408LT) or receive (2406LR) modules and an 8-channel power supply (2400PSUA-8).

The 2400ODU comes with mounting brackets to be conveniently mounted directly on or near the antenna structure.

This turnkey solution provides fiber transport of up to 8x RF signals over individual fibers or multiplexed over a single fiber, and power the connected LNBs.

The 2400ODU-8 also features built-in surge protectors for lightning protection and has options for integrated fiber multiplexer, 10MHz reference transport, RF protection switching, splitters, Bias-Tee and more.



► Features & Benefits

- Minimizes length of coax run from LNB
- Fiber link provides electrical isolation between antenna and facility, mitigating ground loop and lightning issues
- Convenient, time-saving pre-integrated package
- IP65 Weather-sealed enclosure with durable powder coat finish
- Wide operating temperature range
- Lightning protection included on RF inputs/outputs
- Knockouts provided for termination of AC power and fiber conduits
- Each fiber module provides a coaxial monitoring output
- LNB current limit and short circuit protection
- LNB current monitoring for advance warning of LNB failure
- Serial and Ethernet data transceivers available for remote antenna control, monitoring and other applications
- All modules are field-replaceable and hot-swappable
- SmartMON™ monitoring without a separate data connection
- Redundant power supply

► Specifications

RF Specifications:

Frequency Range: 50–3000MHz
(10MHz ref. modules available)
Input Power Range: -10dBm to -60dBm
Noise Figure: 7dB (@ 31.5dB Tx gain)
Group Delay: ±0.5ns for 36MHz transponder

LNB Power:

Voltage: 13V/18VDC, off (selectable)
Current: 500mA
Protection: Short circuit, current limited
LO Control: 22kHz on/off (selectable)

RF Monitor Output:

Number of Outputs: 1 per RF input/output
Output Level: Within ±2.0dB of input signal

Optical Specifications:

Tx Wavelength: 1310nm DFB laser
(1550nm and CWDM optional)
Rx Wavelength: 1270nm–1610nm
Output Power: +2dBm
Optical Sensitivity: -14dBm @ 35dB S/N
on a 36MHz carrier
Optical Budget: -16dB

Connectors:

RF Connectors: F-Type (BNC optional)
Impedance: 75Ω (50Ω optional)
Fiber Connectors: Female FC/APC

Physical:

Without Flanges: 9" D x 16" W x 16" H
(229mm D x 407mm W x 407mm H)
Knockouts: 2x 0.75"
Finish: RAL7035 textured light grey powder coat

Environmental:

Temperature: -30 to +80°C
Dust/Water Protection: IP65

Power:

Number of Inputs: Single or dual (protected) power sources can be accommodated
Connector: Dual IEC 320 male input connectors, inside enclosure
Voltage: Auto-ranging, 100–240VAC
Frequency: 47–63Hz
Power: 1 Amp maximum per input

Note: For additional information and specifications on the included or companion items, please refer to each individual product datasheet.

► Ordering Information

2400ODU-8-B50	Outdoor enclosure for RF fiber system, BNC 50Ω
2400ODU-8-F75	Outdoor enclosure for RF fiber system, F-Type 75Ω

*Note: Standard RF connectors are F-Type 75Ω.
Fiber modules and power supply ordered separately.*

Ordering Options:

2400PSUA-8	8-channel power supply for 2406LR/2408LT series
2400ODU-4GT	Replacement gas tubes for 2400ODU surge suppressors, package of four

Connector and Impedance Options:

-B50	50Ω BNC connectors
-S50	50Ω SMA connectors

Transmitter/Receiver Ordering Options:

2408LT13	L-Band/wideband standalone fiber transmitter, SmartMON™, 1310nm DFB laser
2408T13-10MHZ	10MHz standalone fiber transmitter, 1310nm DFB laser
2408LTxx	L-Band standalone fiber transmitter, SmartMON™, CWDM DFB laser
2408Txx-10MHZ	10MHz standalone fiber transmitter, CWDM DFB laser
2408LT13-5V	L-Band/wideband standalone fiber transmitter, 1310nm DFB laser, 5VDC ±0.2VDC power input
2406LR	L-Band/wideband standalone fiber receiver
2406LR-10MHZ	Standalone 10MHz fiber receiver, standard sensitivity, F-Type 75Ω, FC/APC connectors

2406BIAST-2	High-performance dual-channel bias tee, passes through DC and L-Band with 10MHz reference multiplexer
2406BIAST-2-LNB	High-performance dual-channel bias tee, passes through DC and L-Band with 10MHz reference multiplexer, external DC input option for built-in LNB powering
2406BPX-RF	2x1 standalone RF protection switch, 10–2250MHz, DC passing, 75Ω F-Type connectors
2406ET13-F2+SC	Ethernet transceiver, dual fiber, 1310nm Tx, single-mode fiber only
2406DT13-F2+SC	Data Transceiver, dual fiber, 1310nm Tx, single-mode fiber only

Mux/Demux Ordering Options:

3400CWDM-M4-AP-SA	Standalone 4-channel CWDM mux, 1510–1570nm, LC/APC connectors
3400CWDM-D4-AP-SA	Standalone 4-channel CWDM demux, 1510–1570nm, LC/APC connectors
3400CWDM-M8-AP-SA	Standalone 8-channel CWDM mux, 1470–1610nm, LC/APC connectors
3400CWDM-M8LB-AP-SA	Standalone 8-channel CWDM mux, 1270–1450nm with expansion port, LC/APC connectors
3400CWDM-D8-AP-SA	Standalone 8-channel CWDM demux, 1470–1610nm, LC/APC connectors
3400CWDM-D8LB-AP-SA	Standalone 8-channel CWDM demux, 1270–1450nm with expansion port, LC/APC connectors