CTDI Products: End-to-End Solutions

ORCV412 RFoG ONU

The **CTDI ORCV412 RFoG ONU** delivers downstream RF services over a passive fiber optic distribution network. The ORCV412 serves as the optical transport layer for RF video in deep fiber and FTTH networks. The ORCV412 enables the benefits of a fiber optic distribution network while leveraging existing headend investments for downstream video. The ORCV412 RFoG ONU provides full-spectrum RF frequencies (up to 2.2Ghz) with universal support for headend and customer premises equipment (CPE), and preserves today's operating processes.

Benefits

- Allows deployment of fiber optic distribution network while leveraging existing investments
- Universal support for headend and CPE equipment
- Enables the low maintenance and high reliability of an all fiber access network
- Reduced power consumption via green technology

Features

- Extended spectrum RF video
- Analog & digital video formats
- Supports in-home applications without amplifiers
- In-home power

ORCV412 RFoG ONU

Specifications

Physical

- 1.2” H x 3.5” W x 5” D
  3.0cm H x 8.9cm W x 12.7cm D

Indicators/External Alarms

- Green LED power present
- Red LED for loss of optical signal

Optical Interface

- SC/APC female fiber connector

Customer Interface

- 75 Ohm Coax “F” connector

Optical characteristics

- Typical operating range: >20km
- Input dynamic range: 0 to -6dBm
- Input wavelength: 1545–1565nm
- Loss of optical power alarm: -11dBm

RF characteristics

- RF Output @ 550MHz:
  +16dBmV/ch ±2dBmV
- Freq response: 50MHz-2.2GHz
- Typical load w/o amplification: 4 splits
- **CNR @ -6dBm input power: 48**
- CSO @ 0dBm input power: 55
- CTB @ 0dBm input power: 60

Power & Environmental

- Operating temperature range:
  -40ºC to +65ºC
- Humidity: 95% non-condensing
- Power input voltage: 10 to 16VDC
- Power consumption: 3 Watts

Standards and certifications

- UL listed, CE mark certified for safety
- Meets or exceeds FCC part
  15b for emissions
- RoHS

Ordering information

Part #	Description
ORCV412	Single fiber Optical Receiver, 3rd lambda, 1port, WB

Power

The following CTDI power supply options may be used to operate the optical receiver products. Note: The optical receiver gets its power directly from the CTDI ONT when it is used in the same enclosure. Separate power is not required in this case.

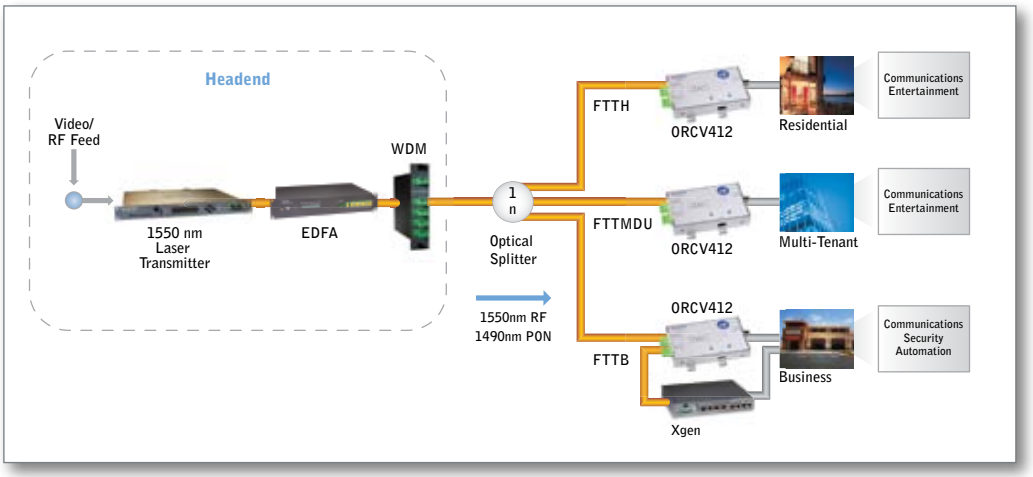
Part #	Description
PSB8000	12VDC, 24W UPS (Charger & 7.2AH battery)
PSB8002	12VDC, 24W UPS hardened (Charger & 7.2AH battery)
PSB1005	12VDC, 24W brick, plug-mounted
PSB1006	12VDC, 24W brick, international plug-mounted
PSB1009	12VDC, 30W hardened UPS for OSPE202 (240VAC)
PSB1010	12VDC, 30W hardened UPS for OSPE202 (120VAC)
BAT1002	12VDC, 7.2AH battery for OSPE202 and PSB8000 series

Mounting

The optical receivers may be mounted directly on an interior wall, or into any of the following CTDI enclosures

Part #	Description
OSPE101	Basic Plastic outside plant enclosure
OSPE110	Enhanced Plastic outside plant enclosure
OSPE202	All-in-One metal enclosure

Downstream RFoG



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