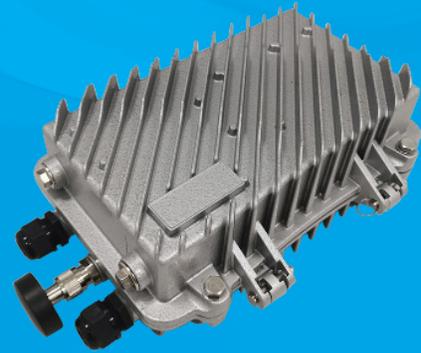




Outdoor DOCSIS 3.1 Backhaul Modem

ODIN1112



Ready to offer cellular service with mobile backhaul over DOCSIS? So is the ODIN1112. It's the world's first DOCSIS 3.1 modem to support DOCSIS Time Protocol (DTP), providing precise network timing to make mobile backhaul over DOCSIS a reality. Pair the ODIN1112 with a small cell gateway and leverage your existing real estate of DOCSIS networks to roll out lucrative wireless services at a significantly reduced cost.

First Modem to Support DOCSIS Time Protocol

When it comes to mobile backhaul over DOCSIS, Hitron leads the way. The ODIN1112 is the industry's first DOCSIS modem to support the DOCSIS Time Protocol (DTP). The challenge with using DOCSIS as a backhaul is how to provide the precision synchronization and timing needed for 5G and LTE, without putting an expensive GPS receiver in each microcell. DOCSIS Time Protocol (DTP) solves this challenge by enabling the passing of networking timing over DOCSIS 3.1 networks to provide precise frequency to devices connected to a DOCSIS modem.

Power over Ethernet (PoE)

Up to 180 Watts is available to power external devices over PoE, such as small cell gateways or surveillance cameras, simplifying your deployments.

Key Features

- DTP (DOCSIS Time Protocol) for small cell deployments and wireless backhaul over DOCSIS
- DOCSIS 1.1/2.0/3.0/3.1 and EuroDOCSIS compliant
- DOCSIS 3.1 2x2 OFDM
- DOCSIS 3.0 32x8 channel bonding
- Switchable 5-42/5-85 MHz
- Supports 1588v2 and SyncE
- High bandwidth, environmental hardened cable modem
- PoE provides power, along with data, over CAT-6 cabling to connected devices
- Extensive operator control via configuration file and SNMP
- Full Dual Stack IPv4/IPv6 Support

Interfaces

- 1x RF F-Type 75Ω Female Connector
- 2x RJ-45 2.5GBASE-T Ethernet Ports
- 1x GPS Antenna (for Device Location)

Reception-Demodulation

- DOCSIS 3.1/3.0/2.0
- DOCSIS 3.1 Demodulation: Multi-carrier OFDM 16 to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 2.5Gbps*
- DOCSIS 3.0 Demodulation: 64QAM, 256QAM
- DOCSIS 3.0 Data Rate: Up to 1.2Gbps with 32 Bonded Downstream Channels
- Frequency (edge-to-edge): 108-1218MHz
- Channel Bandwidth: 6MHz
- Signal Level: 15dBmV

Transmitter-Modulation

- DOCSIS 3.1/3.0/2.0
- DOCSIS 3.1 Modulation: Multi-carrier OFDMA BPSK to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 1Gbps with 2 OFDMA 96MHz Upstream Channels
- DOCSIS 3.0 Modulation: QPSK, 8QAM, 16QAM, 32QAM, 64QAM, and 128QAM (SCDMA only)
- DOCSIS 3.0 Data Rate: Up to 320Mbps with 8 bonded Upstream Channels
- Frequency: Switchable 5-42/5-85MHz
- Upstream Transmit Signal Level: +11 to 65dBmV

Management

- Protocol Support: TFTP, SSHv2, SNMP v2, v3
- Web-based GUI Control, Configuration and Management
- Power-on Self-Diagnostic
- MIB II/MCNS MIB
- Hitron-proprietary MIBs for Extended Support on DOCSIS

DOCSIS Time Protocol

- IEEE 802.3 bt
- Full Timing Support: ITU G.8275.1, G.8273.2
- Partial Timing Support: G.8275.2, G.8273.4

Mechanical

- Waterproof: IP67
- Dimensions: 220mm (H) x 290mm (W) x 126mm (D)
- Net Weight: 4,600 +/- 100g

Electrical

- External Power Supply
 - Input: 45-100VAC 50/60Hz
 - Output/Cat5 Feeding: 54VDC
- PoE Output: 180W in total
- Surge Protection
 - RF Input sustains at least 4KV
 - Ethernet RJ-45 sustains at least 4KV

Environmental

- Operating Temperature: -40°C (-40°F) ~ 60°C (140°F)
- Operating Humidity: 10% ~ 90% (Non-condensing)
- Storage Temperature: -40°C (-40°F) ~ 70°C (158°F)

Regulatory Compliance

- RoHS
- CableLabs
- FCC Part 15 Class B Subpart B, Part 15.247, Part 15.407, Part 2.1091
- ICES-003 Issue 6, Class B
- RSS-102 Issue 5
- IC RSS-247 Issue 2, 2017-02 and RSS-Gen Issue 5, 2018-4
- Canada RSS-Gen Issue 5, Amendment 1, Mar 2019
- UL 62368-1
- cUL 62368-1-14



I.T.V F219020

Specifications subject to change without further notice. Product photo may differ.

DOCSIS 3.1 is a CableLabs standard for high speed Internet access that defines support for up to 10 Gbps downstream and 1 Gbps upstream. Actual cable operator network speeds will vary and will be less than the calculated maximum possible speeds. Actual upload and download speeds are affected by several factors including, but not limited to: the capacity of your cable operator's network, the services offered by your cable operator, cable and Internet network traffic, your computer equipment etc. Final speeds will also be limited by each device and the quality of its connection to the modem or router.

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