

DATA SHEET

Tibit I-Temp MicroPlug OLT

Tibit Technologies



Ciena's Tibit™ I-Temp MicroPlug™ OLT is the network-facing component for a passive optical networking (PON) solution uniquely tailored for deployment in node and other outdoor MSO/carrier solutions.

The Tibit I-Temp MicroPlug OLT is a hot-pluggable SFP+ optical transceiver with a built-in 10G Ethernet-to-10G PON OLT MAC bridge. The transceiver is optimized for high-temperature PON installations requiring less than 20 km of reach. The Tibit I-Temp MicroPlug OLT enables an environmentally hardened PON implementation, while maintaining fidelity to carrier PON standards.

The Tibit I-Temp MicroPlug OLT plugs into remote-node and other high-temperature switch environments with SFP+ sockets. It enables switches to deploy point-to-multipoint, high-speed connections, including in-node solutions with other access capabilities. The pluggable OLT can connect to a wide range of third-party 10G ONUs.

Our industry-unique Tibit I-Temp MicroPlug OLT paired with autonomous boot mode software allows plug-and-play implementation of the entire solution.

Ciena's pluggable OLT technologies require less space and power than any other product on the market.

Features and benefits

- Hot-pluggable SFP+ 10G optical transceiver with embedded universal Ethernet-to-PON MAC bridge
- Software-configurable, symmetrical 10G/10G rates for XGS-PON or 10GE-PON protocols
- Industrial temperature (-40°C to 85°C case temp) deployable
- Supports 500 Alloc-ID and jumbo frames up to 900 Kb/s
- In XGS-PON mode: compliant with ITU-T G.9807.1 specifications
- In 10GE-PON mode: compliant with IEEE802.3av, SIEPON, DPoE, and PON AES specifications
- IEEE 802.1AE MACSec uplink encryption
- IEEE 1588v2 and SyncE timing and sync support
- In-band management via Ethernet link OAM (IEEE 802.3 clause 57)
- Class PR10+ optical power budget
 - 1577 nm cooled DML laser
 - 1270 nm APD/TIA burst receiver
- Integrated digital diagnostics and monitoring (SFF-8472) and burst RSSI
- Single fiber SC/UPC receptacle
- Industry-unique modularity and scalability
- Pairs with modular MicroClimate Management System® (MCMS) for modular integration into vendor and carrier networks

Applications

- Remote-node and other high-temperature environments
- Outdoor cabinet deployments
- High-speed networks requiring point-tomultipoint economics
- Traditional MSO/cable plant fiber upgrade/node splits
- · Wireless backhaul/midhaul
- Multi-Dwelling Unit (MDU)/Multi-Tenant Unit (MTU) deployments

Ordering information

Part number	Link budget	Case temp
TXM-MPOLT-06I	CLASS PR30+	-40°C TO +85°C

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