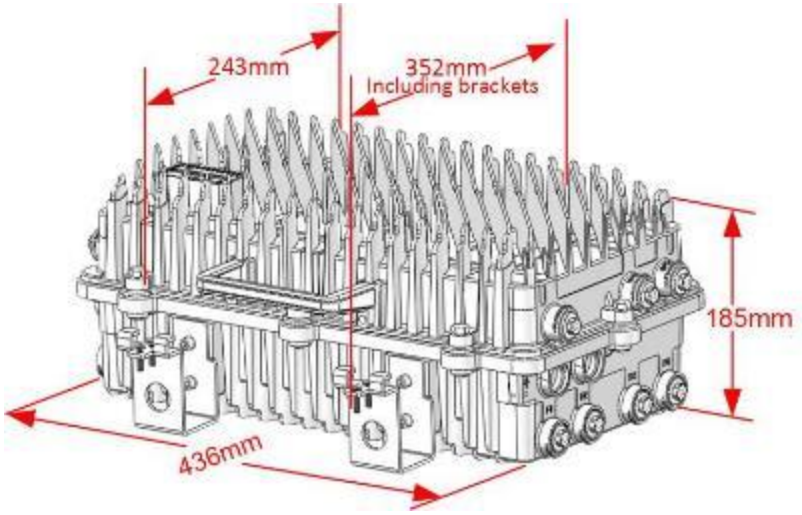
Slingshot Node 3.1 CMTS

Modular Cable Access For Field Deployment

The Diablo Data Slingshot Node 3.1 is a field-deployable cable modem termination system (CMTS) that connects a fiber-fed service network to coaxial cable distribution. It combines replaceable DOCSIS, RF and power modules in an IP67 enclosure, with four RF outputs and adjustable RF branches to support installation and alignment to the local cable plant.



Slingshot Node 3.1 CMTS Enclosure

Product Features

- **Channel Capacity.** Supports up to 32 SC-QAM and 4 OFDM downstream channels, plus up to 8 ATDMA and 2 OFDMA upstream channels.
- **Modem Licensing.** Choose a license for up to 512 or 1,024 registered modems.
- **Flexible Uplink Configuration.** Supports Ethernet or PON network connections using pluggable optical modules.
- **Adjustable RF Distribution.** Provides four RF outputs, downstream attenuation/equalization and independent upstream branch attenuation.
- **Serviceable Modular Design.** Supports quick replacement of DOCSIS, power and RF modules; RF diplexers can be replaced to suit the required split.
- **Installation Flexibility.** Offers local AC or coaxial line powering, multiple mounting methods and optional CATV optical reception.

Slingshot Node 3.1 CMTS

System Features

Multiservice Support	DOCSIS service flows, EQAM and PacketCable/PCMM for data, video and voice applications.
IP And Provisioning	IPv4/IPv6; DHCP/DHCPv6 relay and snooping, prefix delegation, local provisioning and TFTP proxy.
VLAN And L2VPN	VLAN tagging, subnet-based VLAN assignment and Layer 2 VPN support.
Quality Of Service	Service classes and service-flow management; BE, NRTPS, RTPS, UGS-AD and UGS scheduling.
Channel Management	Channel bonding, restricted/general load-balancing groups and bandwidth admission control.
Modem And CPE Management	Modem/CPE status and queries, remote modem queries, flap lists and modem channel steering.
RF Diagnostics	Upstream noise/spectrum monitoring, channel-quality statistics and upstream pre-equalization.
RF Resilience	Configurable upstream automatic frequency hopping and spectrum-group management.
Multicast	Multicast authorization and group-management controls.
Network Security	BPI+, source-address verification, IP firewall and modem MAC allow/block lists.
Administrator Access	Local users and TACACS+/RADIUS authentication and authorization.
Management And Telemetry	CLI, web GUI, SSH, SNMP, Syslog/traps and IPDR reporting.
Maintenance	CLI/web firmware upgrades, configuration backup and zero-touch deployment support.

Software features depend on firmware and configuration.

Slingshot Node 3.1 CMTS

Hardware And Channels

SC-QAM Downstream	Up to 32 channels
OFDM Downstream (DOCSIS 3.1)	Up to 4 channels
Registered Modem License Options	512 or 1,024 registered modems
ATDMA Upstream	Up to 8 channels
OFDMA Upstream	Up to 2 channels
Enclosure Dimensions (L × W × H)	436 × 243 × 185 mm
Dimensions Including Brackets	436 × 352 × 185 mm
Weight	Less than 20 kg
Enclosure Rating	IP67
Maximum Power Consumption	115 W
RF Connections	4 mixed upstream/downstream RF outputs
RF Connectors	5/8-24 ports; supplied 5/8 male-to-3/8 female coaxial adapters
Optical Uplink	Pluggable SFP/SFP+ modules; Ethernet or PON configuration
Management Connections	GE management interface and serial console
Power Supply Options	110/220 V AC local power or 60/90 V AC coaxial line power
Mounting Options	Strand/bar, back-bar, angle-plate or wall installation

Select uplink optics, RF split, power supply and mounting accessories for the intended installation. Options depend on the supplied configuration. Specifications are subject to change without notice.