

Product Brochure Quantum18TM GSN 1.8GHZ Node

OVERVIEW

Introducing the Quantum18 GSN 1.8GHz Node, the next-generation HFC node designed to elevate your network's performance and reliability. With support for both DOCSIS 3.1 and 4.0 configurations, the GSN node seamlessly integrates into existing infrastructure while offering advanced features for future-proof scalability. Engineered for high efficiency and robust power management, this node ensures your network is ready to meet the demands of tomorrow.

Seamless DOCSIS 3.1 and 4.0 Support: Upgrade your network today with full support for both DOCSIS 3.1/1.2GHz and DOCSIS 4.0/1.8GHz RPDs for future-proofing.

· Supports 3rd party RPD modules for maximum flexibility.

High Output RF: Get more network performance with up to 1.8GHz RF output.

Signal integrity across 105MHz to 1.8GHz.

Backward Compatible with GS7000 Housings: Drops into existing infrastructure with backwards compatibility to GS7000 housings, no need to resplice or replace back housing.

Fits in GS7000 base and lid for easy upgrades.

Remote Management System: Control your network with full electronic controls for setup, alignment and monitoring.

Intuitive interfaces for easy configuration and real-time monitoring.

Future-Proof Housing Lid Design: New lid has more power dissipation and can handle higher thermal loads for DOCSIS 4.0.

 Future proof your network with a new housing lid design that improves power dissipation and scalability.



PRELIMINARY

Product Specifications	
Node Configuration	Supports DOCSIS 3.1 (1.2GHz) and DOCSIS 4.0 (1.8GHz)
Amplifier Ports	4 active RF ports; ports 1 and 4 always active
Downstream Frequency	261 MHz to 1791 MHz
Downstream Output Levels	34.0 dBmV to 51.0 dBmV
Upstream Unity Gain	Maintained from node port to RPD input
Housing	Compatible with the GS7000 base and existing lid. New lid option with 180W power dissipation.
Power Supply	Redundant, designed for compatibility with GS7K infrastructure
Segmentation	Supports 1x1, 1x2, 2x2, 2x4 configurations
Thermal Management	Integrated thermal compensation, with advanced power dissipation options
Transponder Compatibility	Supports both RPD and Quantum Link telemetry for remote configuration

Environmental	Value
Operating temperature range	-40 to 140°F (-40 to 60°C)

Mechanical	Value
Housing Dimensions	17.3 in. x 7.2 in. x 7.8 in. (439.4 mm x 182.9 mm x 198.1 mm)
Weight Housing with power supply	19 lb (8.6 kg)