

HFC Mini Node



The Titan CATV Mini-Nodes are high quality, low cost nodes that support all traditional services. They are SCTE compliant and can be installed onto existing HFC networks with 1 or 2 fiber ODNs using the integrated WDM option as needed. The CATV Mini Node operates on safe 12VDC power and is constructed with industrial grade components in a robust sealed die-cast housing allowing it to be used without special cooling or environmental management. The Titan CATV Mini-Node is equipped with multiple test points and indicators that are accessible while the unit is in operation, allowing service personnel to diagnose issues without removing the node from service. It is the perfect solution for splitting an existing HFC node, upgrading an existing node, or installing a new site and space is a concern.

Applications

- HFC node splits
- CATV and data services for fiber MDU and business parks
- Supports DOCSIS 3.0 data applications as well as HDTV and interactive TV services
- Add capacity to existing HFC served areas without expensive infrastructure upgrades

Features and Benefits

- Small form factor rugged case for long life in harsh conditions
- Temperature hardened for use in non temperature controlled environments
- Optional built in WEM allows forward and return path signals to share the same fiber
- Precision laser control circuitry greatly reduces data corruption, and minimizes ingress noise
- Full range forward path (up to 1GHz) accommodates content growth into the future
- 6/42MHz or 5/65MHz band-split options for world-wide deployments

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Generic Specifications

Dimensions W x H x D	5.25" x 1.25" x 4.25"
Weight	Approx 12 oz.. (0.34kg)
Optical connectors	SC/APC
RF connector/power/monitor	75 Ohm female "F" connector
Band Plan	42/52Mhz split or 65/80MHz split
Electrical	
AC power adapter	Universal AC Adapter 12VDC out included
DC power	11.5 to 16VDC dedicated power lead
Power consumption	<3 Watt typical @12VDC
Environmental	
Operating temp range	-20 to +60 °C
Storage temp range	-40 to +85 °C
Humidity	5 to 95% (non-condensing)

Receiver (forward path) Performance

Optical wavelength	1280 to 1620
Optical input power	-6dBm to +3dBm
RF Frequency	54 to 1000MHz
RF output power	+25 dBmV (+/- 1dB)
CNR @-6dBm input	52 (78 channel loading, 0dBm input)
CSO @ 0dBm input	-60
CTB @ 0dBm input	-65

Transmitter (return path) Performance

Wavelength	1290 to 1330 (1310 typical @25C)
Laser output power	-0.5 to +2dBm (+1 typical)r
RF frequency	5 to 42MHz or 5 to 65MHz
RF input power range	+20 dBmV
NPR Dynamic Range	>37 (FP Link loss>15dB)

Management

LED Indicators	DC power, Optical Transmit Optical receive
Optical test points	Input power (1V/MW) optical output power (1V/MW)
RF Monitor ports	Forward path & return path "F" connectors

Ordering Information

TNHFC- er-w

er = Return-Path range: none =5-42MHz USA domestic er = 5-65MHz extended return
w = Internal WDM none = No WDM, standard 2-fiber w = Internal WDM, 1-fiber