Optical Receivers

Indoor Optical Node

OR200

Product Description

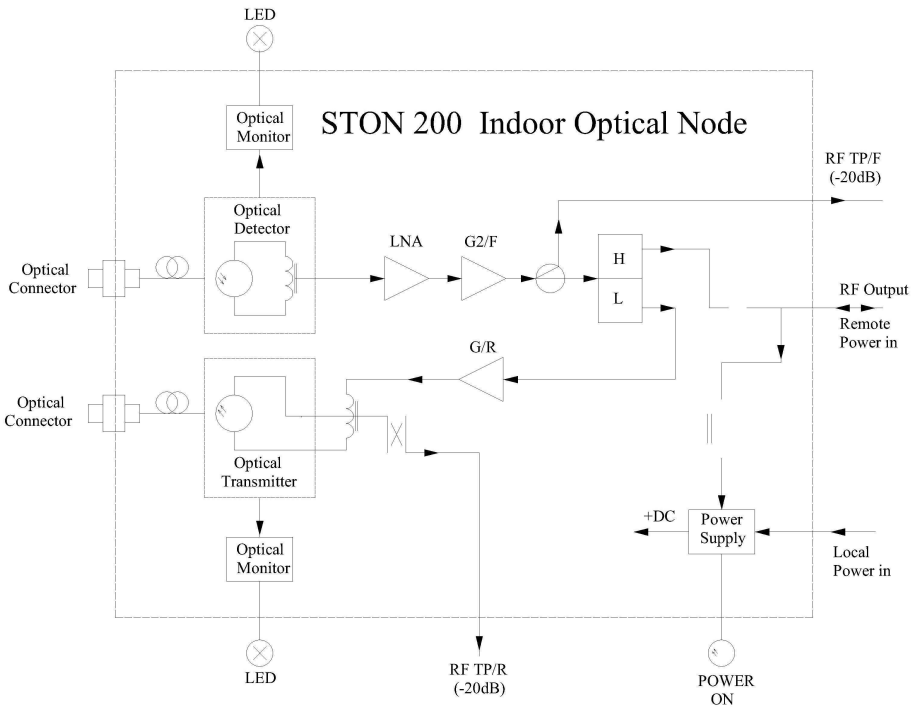
The OR200 optical node is a two ways optical node used for video (digital and analog) as well as high-speed data services over advanced hybrid fiber/coax (HFC) network terminal.

This optical node combines an optical receiver working from 52 to 870MHz and an optical transmitter for up-stream from 5 to 42MHz*.

Features

- The optical detector build-in a current converter with 6dB gain.
- Use a low noise pHEMT GaAs FET for the first RF amplifier,it is suitable for low optical power receive.
- Remote or co-located powering capable.
- Die-cast aluminum housing for excellent heat disspation.

Functional Diagram



* Version of different diplex filter is also available

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Product Specifications

Station Parameters: Forward Path

General Performance	Conditions	Units	Specifications
▪Electronic parameters			
Bandwidth		MHz	54-870 / 70-870 / 86-870
Flatness	Worst case	± dB	0.75
Impedance		Ohm	75
RF output level		dBmV	24±2@ -4dBmW optical power OMI=3.7%
RF return loss	Worst case	dB	10
RF test point		dB	20±0.75
▪Optical Parameters			
Optical receiver power		dBm	-8 to 0
Optical power monitor		dBm	Power > 0 LED (red)
			Power < -8 LED (green)
Wavelength		nm	1200 to 1600

Station Parameters: Reverse Path

▪Electronic parameters			
Bandwidth		MHz	5-42 / 5-50 / 5-65
Flatness	Worst case	± dB	0.75
Impedance		Ohm	75
RF return loss	Worst case	dB	16
▪Optical Parameters			
Type of transmitter		N/A	FP
Output optical power	Standar	dBmW	0.5
Optical power monitor		dBmW	Power >1. LED (red)
			Power < -3 LED (green)
Reverse channel loading	With 10dB fiber link	N/A	T9&T10
RF input level		dBmV	20
RF test point		dBc	20±0.75
Wavelength		nm	1310
CNR	Worst Case	-dBc	>45
CTB(FP)	Worst Case	-dBc	>45
CSO(FP)	Worst Case	-dBc	>45

Environmental

Operating temperature		°F (°C)	-40 to 140(-40to +60)
DC voltage input range		VDC	12 TO 18
Power Consumption	Typical	Watts	4
Surge Protection	All ports	KV	6
RF output stability over temperature		dB	±2

Physical

Optical connector	SC/APC	N/A	SC/APC,
Dimensions (H×W×D)		In, (cm)	5.9x3.5x1.35 (15.0x8.8x3.4)