

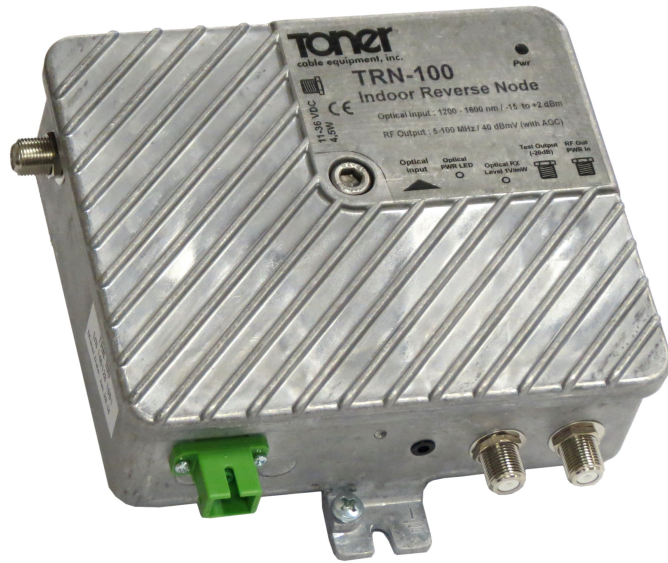
# Toner

## TRN-100

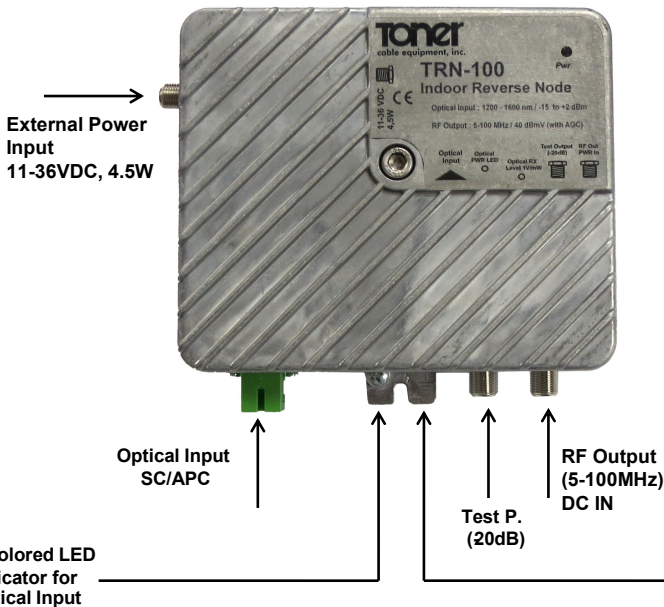
### 1310 / 1550 nm Reverse Path Node Optical Receiver

#### Features

- Receive only indoor optical node for CATV applications
- Operational bandwidth from 5 MHz - 100 MHz
- Wide optical input range -15 to +2 dBm
- High RF output range; 40 dBmV stable within wide optical input range (-6 to 2 dBm) with AGC feature
- GaAs E-pHEMT push-pull technology for high and stable output level with very low power consumption
- Optical input test point
- Three colored LED indicator for optical input level
- External powering (11-35 VDC) or remote powering over coax line via power inserter
- Surge protection (6 kV) at RF output



The TRN-100 is a high performance CATV reverse path receiver for bi-directional optical fiber networks. The TRN-100 has a wide optical input window of -15 to +2 dBm, RF output is stable @ 40 dBmV in the optical range of -6 to +2 dBm due to AGC, and is ideal for sub-channel or upstream data.



Optical input (dBm)	Optical input (mW)	Optical Monitor Out (V)
2	1,58	1,62
1	1,26	1,29
0	1	1
-1	0,79	0,81
-2	0,63	0,65
-3	0,5	0,52
-4	0,4	0,41
-5	0,32	0,32
-6	0,25	0,25

#### LED Indicator for Optical Input

<b>RED</b>	>2dBm
<b>GREEN</b>	-6....2dBm
<b>YELLOW</b>	<-6dBm

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### Specifications

<b>FORWARD</b>	
<b>Optical Performance</b>	
Wavelength	1200-1600 nm
Operational AGC	Standard
Input Optical Power Range	AGC is operational within -15 to +2 dBm LED indicator operates from -6 to +2 dBm
Optical Input Test Point	1 external, with calibrated power meter
Optical Input LED	3 color
Optical Connector	SC/APC
<b>RF Performance</b>	
Bandwidth	5-100 MHz
Gain Flatness	± 1.5 dB
Gain Control	0 to 18 dB
Output Return Loss	≤ -14 dB
Test Point	-20 dB
<b>Link Performance</b>	
Output Level	40 dBmV min (stable from -6 to +2 dBm optical level due to AGC)
<b>ELECTRICAL &amp; PHYSICAL PERFORMANCE</b>	
Surge Withstand	IEEE62.41 Cat.A3 (6kV, 200A)
Powering - External Adaptor	11-36 VDC external power supply, connection with F type connector (DC powering)
Powering Over Coax	11-36 VDC external powering available
Power Consumption	4, 5 Watt
Temperature	0 to 55°C
Optical Connector	SC/APC
Enclosure	Aluminum diecast housing (IP54)
Weight	3.7 lbs (1.7 kg)
Dimensions	5.5 x 5.5 x 1.7 inches (140 x 140 x 44 mm)