

## INT-R1900M

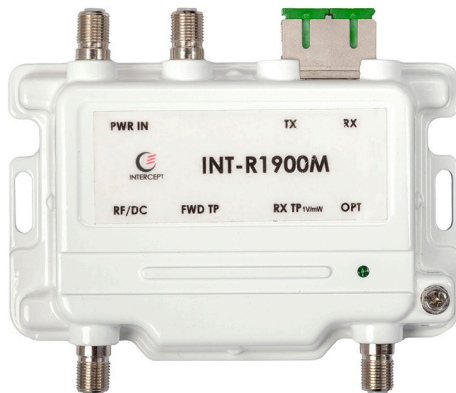
### Features and Benefits

The INT-R1900M is a compact bi-directional optical node, the ideal platform for delivering upstream and downstream DOCSIS, voice, video and high speed data service over FTTB or FTTX applications. It includes Automatic gain control (AGC), Burst Mode Return Lasers, and optional bandwidth splits. It also has an Optional PON Pass-through port.

### Applications

- CATV, HFC networks
- RF over Glass

- xPON Pass Through
- Supports DOCSIS 3.0 or 3.1
- Burst Mode Operation - Laser type; Burst mode DFB
- Optical automatic gain control (AGC), -6 to +2 dBm
- Input optical wavelength: 1550 nm
- Output wavelength: 1610 nm or CWDM
- Downstream bandwidth: 54 MHz to 1250 MHz
- Upstream bandwidth: 5 MHz to 42 MHz
- Output RF signal level, 18 dBmV/Ch (typ.) @ 870 MHz
- Input RF signal level, 20 to 40 dBmV/Ch
- RF test point, -20 dB
- Supply power, 12 voltage DC
- Power-on, Optional I/P, Optical Tx LED indicators  
Optional UPS available
- Follow SCTE 174 Standard





INTERCEPT

# INT-R1900M Specifications

Parameter	Conditions	Min	Typ	Max
<b>Forward Receiver</b>				
Optical Wavelength (nm)		1540 ~ 1565		
Monitor Voltage (V/mW)	$\lambda=1550$		1	
Optical Input Power (dBm)	Optical AGC	-6 to 2		
Frequency Range (Optional) (MHz)		54		1250
Flatness of Frequency Response (dB)	f=54 to 1250 MHz		$\pm 0.75$	
Output Return Loss (dB)		16		
Reference Output Level (dBmV)	$\pm 2$ dB		18	
Slope (dB)			5	
Optical Input Return Losses (dB)		45		
C/N (dB)	(-1 dBm optical input, 3.5% OMI/ch, 79 ch NTSC, Digital ch above 550 MHz at -6 dB offset)	50	51	
CTB (dB)				-65
CSO (dB)				-60
<b>Return Transmitter</b>				
Optical Wavelength (nm)		1610		
Optical Output Power (mW)		$\geq 2$		
RF Input Level (dBmV)		20-40		
Dynamic Input Range (dB)	NPR $\geq 38$		20	
Frequency Range (Optional) (MHz)		5		42
Flatness of Frequency Response (dB)	f=5 to 42 MHz		$\pm 0.75$	$\pm 1$
Input Return Loss (dB)	f=5 to 42 MHz	16		
Optical Output Return Loss (dB)		45		
Power at which LaserTurn ON (dBmV)			15	
Power at which LaserTurn OFF (dBmV)			-8	
<b>General Parameters</b>				
Total Power Consumption (W)	With 12V DC power pack		3.8	
Operating Mounting Base Temperature (°C)	Humidity 5% to 95%, non condensing	-20		55

