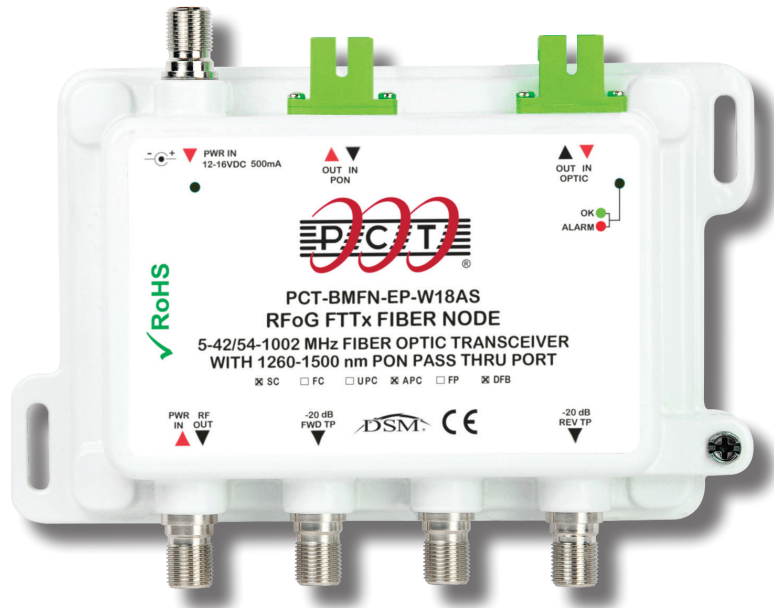


RFoG FTTx MINI FIBER NODE

Delivers Advanced Bi-Directional, Interactive RF Services
PON Pass-Through



INNOVATIVE SOLUTIONS

PCT's BMFN-EP-WxxAS Forward and Return Path Transceiver for RFoG, PON and Hybrid PON networks delivers advanced bi-directional, interactive RF services over a passive fiber optic distribution network. It is designed to operate on an RFoG system or an optional overlay of an RFoG system onto a Passive Optical Network (PON) system with either a 1310 or a 1610 nm return laser version.

The PCT-BMFN-EP-WxxAS burst-mode mini node provides the freedom and flexibility to work with any PON solution that uses industry standard optical wavelengths, and serves as the optical transport layer for RF video or DOCSIS technologies. By extending the optical network directly to a home or building, the BMFN eliminates neighborhood HFC nodes and the annual testing and maintenance required to operate them. It provides

bi-directional services over extended RF frequencies while being agnostic to head-end equipment and customer premises equipment, preserving today's operating processes.

PCT's burst-mode mini node provides flexibility to grow your network to meet customer demand now and into the future

Standard Features

- RF spectrum to 1 GHz
- Universal HFC set top box and head-end support
- Transparent return path capability
- Support most in-home applications without amplifiers
- Direct or remote powering over 75 Ohm coax cabling



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Specifications

Parameters	Unit	PCT-BMFN-EP-WxxAS	PCT-BMFN-65EP-WxxAS
Downstream			
Optical Receiver			
Wavelength Range	nm	1540 to 1565	
Input Power Range	dBm	+1 to -6	
Connector Type	--	SC / APC Female	
Return Loss	dB	≥ 40	
RF Performance			
Passband	MHz	54 to 1002	85 to 1002
Output Level	dBmV	+19 @ 1002 MHz CW	
Output Level Stability	dB	± 2 over +1 to -6 dBm input range	
CNR	dBc	≥ 48 @ -1 dBm optical input	
CSO	dBc	≤ -62 @ -1 dBm optical input	
CTB	dBc	≤ -65 @ -1 dBm optical input	
Output Return Loss	dB	≥ 16	
Output Flatness			
54 to 1002 MHz	dB	± 1.5, excluding tilt	
Output Tilt			
54 to 1002 MHz	dB	5 ± 2	
Upstream			
Return Transmitter			
Transmission Wavelength	nm	1310 ± 10 (C3) or 1610 ± 10 (C18)	
Laser Type	--	FP (1310 nm only) / DFB	
Optical Power	dBm	0 (FP), +3 (1310 nm DFB), +3 (1610 nm DFB)	
Optical Interface	--	SC / APC Female	
RF Performance			
Passband	MHz	5 to 42	5 to 65
Input Range	dBmV	33, 4 Channels	
Turn on Threshold	dBmV	15	
Dynamic Range @ 38 dB NPR	dB	> 10	
PON Pass-through Port			
Wavelength Range	nm	1260 to 1500	
Return Loss	dB	≥ 40	
Connector Type	--	SC / APC Female	
General			
Interface	--	Dedicated F port, Female	
Power	VDC / mA	15 / 500, F-type connector AC / DC power adapter to dedicated PWR input or RF output port with power inserter	
Operating Temperature	°C (°F)	-40 to +60 (-40 to +140) ambient	
Storage Temperature	°C (°F)	-40 to +85 (-40 to +185) ambient	
Humidity	%	up to 95, non-condensing	
Status Indicator	dBm	Optical Input Power LED: Green > -9, Red < -10	
Dimensions (W x H x D)	mm (in)	152 x 91 x 33 (6 x 3.6 x 1.3)	
Mounting	--	Direct mounting in an interior panel or wall	

Ordering Information

PCT-BMFN-EP-WxxAS Mini Fiber Node, Burst Mode, SC / APC with US power adapter

PCT-BMFN-65EP-WxxAS Mini Fiber Node, Burst Mode, SC / APC with C style power adapter

xx = F (1310 nm FP), 03 (1310 nm DFB) or 18 (1610 nm DFB)
Other connector options: **US** = SC / UPC, **FS** = FC / APC, **FU** = FC / UPC

Option

PCT-MPI -1G Power Inserter

