

FTTx ULTRA MINI FIBER NODE

Drop In Modularity Wherever Your Fiber Takes You



INNOVATIVE SOLUTIONS

PCT's receive only Ultra Mini Fiber Node (UMFN) offers flexibility in operation and unchallenged price vs. performance in a miniature housing. Low distortion and flexible input levels allow for deployment where conventional nodes are impractical.

Low power consumption and surge withstand design provide low energy consumption and long-term, trouble free operation. PCT also offers an Ultra Mini Fiber Node designed for use in PON networks, making it ideal for video overlay applications. The PON version (WAS option) for the UMFN is designed with optical filtering which only allows 1490 to 1620 nm to be received by the node.

Standard Features

- 1 GHz design
- Operates from -8 to -1 dBm and wideband receiver from 1200 to 1620 nm wavelengths
- Excellent performance specifications at -4 dBm optical input:
 - $CNR \geq 48$ dBc
 - $CSO \leq -63$ dBc
 - $CTB \leq -65$ dBc
- Perfect for FTTx video overlays
- Ultra small, modular form factor for simple installation
- Internal filter version (WAS option) is ideal in PON network overlays
- Use in high-density applications (MDUs, schools / universities, hospitals, business parks and PEGs)



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Specifications

Parameters	Unit	PCT-UMFN-(W)AS
Downstream		
Optical Receiver		
Wavelength Range	nm	1200 to 1620 (WAS Option, 1490 to 1620) ¹
Input Power Range	dBm	-8 to -1
Connector Type	- -	SC / APC - standard
Return Loss	dB	≥ 60 with APC type connector
RF Performance		
Passband	MHz	45 to 1002
Output Level	- -	24 dBmV @ -4 dBm optical input, 80 NTSC channels loading +450 MHz digital loading
CNR ²	dBc	≥ 48 @ -4 dBm optical input
CSO	dBc	≤ -63 @ -4 dBm optical input
CTB	dBc	≤ -65 @ -4 dBm optical input
Impedance	Ohms	75
Output Return Loss	dB	≥ 16
Flatness	dB	± 1
General		
Power	VDC / mA	12 / 200, F-type connector AC / DC power adapter to dedicated PWR input port or RF output port with optional power inserter
Operating Temperature	°C (°F)	-40 to +60 (-40 to +140) ambient
Humidity	%	up to 95, non-condensing
Dimensions (W x H x D)	mm (in)	86 x 59.8 x 25.8 (3.4 x 2.4 x 1)
Weight	g (oz)	142 (5)

Notes: 1. -22dB signal rejection below 1490 nm. 2. CNR ≥ 51 dB with -1 dBm optical input.

Ordering Information

PCT-UMFN-ASx Ultra Mini Node, Receiver Only, SC / APC, 45-1002 MHz

PCT-UMFN-WAS Ultra Mini Node with Internal 1550 nm Filter, Receiver Only, SC / APC, 45-1002 MHz

x = Plug style indicator, default is US plug style (PCT-UMFN-AS)
Power adapter included, specify type when ordering.
Other frequency splits available upon request.

Option

PCT-MPI -1G Power Inserter

