



# PTP 230

Our Point-to-Point (PTP) 200 Series Wireless Ethernet Solutions are designed to give you high-throughput, reliable broadband communications on a tight budget. With a PTP 200 Series solution, enterprises, government organizations and service providers with limited resources can establish and extend backhaul communications affordably.

Available in both 5.4 GHz or 5.8 GHz, the PTP 230 systems can synchronize communications using a GPS timing device, allowing you to collocate multiple radios with virtually no self-interference. Based on OFDM technology, the PTP 230 offers robust performance, even in near or non line-of-sight (nLOS or NLOS) conditions. Upgrade your PTP 100 link today by simply replacing your radios, and tripling your throughput.

Cambium Networks provides exceptional wireless broadband connectivity solutions. With more than 3 million modules deployed in thousands of networks around the world, Cambium solutions are proven to provide cost effective, reliable data, voice and video connectivity.

## SPECIFICATIONS

PRODUCT	
<b>MODEL NUMBER</b>	5.4 GHz: 5480BH10, 5480BH20, 5480BH50 5.8 GHz: 5780BH10, 5780BH20, 5780BH50
SPECTRUM	
<b>CHANNEL SPACING</b>	Configurable on 5 MHz increments
<b>FREQUENCY RANGE</b>	5.4 GHz: 5.470 GHz – 5.725 GHz 5.8 GHz: 5.725 GHz – 5.875 GHz
<b>CHANNEL WIDTH</b>	Configurable to 10 or 20 MHz
INTERFACE	
<b>PHYSICAL LAYER</b>	OFDM 256FFT
<b>MAC (MEDIA ACCESS CONTROL) LAYER</b>	Cambium Proprietary
<b>ETHERNET INTERFACE</b>	10/100 Base T (RJ-45)
<b>PROTOCOLS USED</b>	Proprietary OFDM
<b>NETWORK MANAGEMENT</b>	HTTP, Telnet, FTP, SNMPv2c; Wireless Manager, version 3.0 or higher
<b>VLAN</b>	802.1ad (DVLAN Q-in-Q), 802.1Q with 802.1p priority, dynamic port VID
PERFORMANCE	
<b>ARQ</b>	Yes
<b>CYCLIC PREFIX</b>	1/4, 1/8, or 1/16 fixed
<b>MAXIMUM DEPLOYMENT RANGE</b>	Base unit: 5 km (3.1 mi.) with LENS: 19 km (12 mi.) with Reflector dish: 50 km (31 mi.)
<b>MAXIMUM AGGREGATE THROUGHPUT</b>	50 Mbps
<b>MODULATION LEVELS (ADAPTIVE)</b>	1X=QPSK, 2X=16-QAM, 3X=64-QAM
<b>LATENCY</b>	5 to 7 ms round trip
<b>FORWARD ERROR CORRECTION</b>	3/4 Reed-Solomon block coding

## SPECIFICATIONS

<b>GPS SYNCHRONIZATION</b>	Yes, via CMM3, CMM4 or UGPS (The PTP230 can also provide the UGPS with power)
<b>QUALITY OF SERVICE</b>	DiffServ QoS
<b>ACCESS METHOD</b>	Time Division Duplexing(TDD)
<b>LINK BUDGET</b>	
<b>ANTENNA BEAM WIDTH</b>	55° azimuth, and 55° elevation (can be narrowed using lens or reflector dish)
<b>TRANSMIT POWER</b>	-30 to +19 dBm to EIRP limit by region (1 dBm interval)
<b>ANTENNA GAIN</b>	Integrated - 10 dBi
<b>MAXIMUM TRANSMIT POWER</b>	19 dBm
<b>EIRP</b>	Up to 44 dBm (with reflector dishes), subject to regulatory limits
<b>SENSITIVITY (dBm typical)</b>	Up to -86 dBm (with FEC)
<b>REFLECTOR GAIN</b>	+15 dBi
<b>LENS GAIN</b>	+6 dBi
<b>PHYSICAL</b>	
<b>WIND LOADING</b>	90 lbs.
<b>MEAN TIME BETWEEN FAILURE</b>	>90 Years
<b>ENVIRONMENTAL</b>	IP55
<b>TEMPERATURE</b>	-40° to +131° F (-40° to +55° C)
<b>WEIGHT</b>	0.45 kg (1 lb.)
<b>WIND SURVIVAL</b>	118 mph (190 kph)
<b>DIMENSIONS (HxWxD)</b>	30 x 9 x 9 cm (11.75" x 3.4" x 3.4")
<b>MAXIMUM POWER CONSUMPTION</b>	10W
<b>INPUT VOLTAGE</b>	24 to 30V
<b>SECURITY</b>	
<b>ENCRYPTION</b>	56-bit DES, 128-bit AES Optional
<b>CERTIFICATIONS</b>	
<b>INDUSTRY CANADA CERT</b>	5.4 GHz: 109W-5490G 5.8 GHz: 109W-5790
<b>FCC ID</b>	5.4 GHz: Z8H89FT7638 5.8 GHz: Z8H89FT7634
<b>CE</b>	5.4 GHz: EN301 893 v1.6.1 5.8 GHz: EN302 502 v1.2.1

**anfer**

RADI COMUNICACIONES

info@anfer.com www.anfer.com

Tel. (+34) 963 311 410 Fax. (+34) 963 311 411