









PTP Series Comparison

	PTP 450 	PTP 650L 	PTP 650S 	PTP 650 
WHAT FREQUENCY DO YOU NEED?	5.4/5.8 GHz, 3.3-3.6 GHz, 3.55-3.8 GHz	4.9 – 6.05 wideband	4.9 – 6.05 wideband	4.9 – 6.05 wideband
WHAT IS YOUR PRIMARY CUSTOMER BASE?	Small Business / Residential Access / 3 GHz license holders	Enterprise Access Video Surveillance	Small-cell Backhaul Video Surveillance Short-range NLOS Enterprise Access	Macro-cell Wireless Backhaul / WISP Backhaul / Industrial / Oil-Gas
DOES YOUR CUSTOMER HAVE ACCESS TO 3 GHz?	3.3-3.6 GHz, 3.55-3.8 GHz	N/A	N/A	N/A
DOES YOUR CUSTOMER HAVE ACCESS TO 4.9GHz?	N/A	Y	Y	Y
IS THE ARPU FOR ENTERPRISE CUSTOMERS A STRONG CONSTRAINT?	\$895/\$995 list per END	\$1895 list per END	\$2795 list per END	\$2495 - \$5300 per END
DO YOU HAVE BANDWIDTH INTENSE APPLICATIONS AND REQUIRE HIGH THROUGHPUT CAPACITY?	125 MBPS	100 Mbps standard SW license for 300 Mbps	450 Mbps up to 2km	125/250/450 Mbps
DO YOU HAVE CUSTOMERS WITH LONG-RANGE LINKS REQUIRING HIGH LINK BUDGETS?	9dBi integrated Plus CLIP and/or Reflector Dish or Connectorized	19dBi integrated	19dBi integrated 2km range limit	23dBi integrated or Connectorized Antennas
IS YOUR SPECTRUM HIGHLY CONGESTED AND YOU REQUIRE HIGH SPECTRUM EFFICIENCY?	6.25 bps/Hz	10 bps/Hz	10 bps/Hz	3/6/10 bps/Hz
DO YOU OPERATE IN A LIMITED CHANNEL BANDWIDTH?	5/10/20 MHz 3.5 / 7.0 MHz (3GHz only)	5/10MHz SW license for 15/20/30 MHz	5/10/15/20/30/45 MHz – SW upgradable	5/10/15/20/30/45 MHz
DOES YOUR CUSTOMER HAVE APPLICATIONS REQUIRING SMALL PACKET SIZES?	13K	>900K	>900K	>900K
DO YOU REQUIRE QoS MANAGEMENT FOR VARIOUS TYPES OF SERVICES?	2 levels	8 levels	8 levels	8 levels
DOES MY CUSTOMER REQUIRE OUT-OF-BAND MANAGEMENT?	N/A	Y	Y	Y
DID CUSTOMER ALREADY DEPLOYED PTP 230? DESIRE TO SYNCHRONIZE WITH PTP 230?	Canopy GUI TDD SYNC CMM4	N/A	N/A	N/A
DOES MY CUSTOMER REQUIRE AN OPTICAL FIBER INTERFACE?	N/A	Y	Y	Y
ARE YOU TARGETING VIDEO SURVEILLANCE TO A SINGLE CAMERA?	Fully Flexible DL/UL Configurations 1% Variable 85/15g	N/A	N/A	N/A
DO YOU OPERATE IN DEMANDING ENVIRONMENTAL CONDITIONS?	IP54 40°C to +60°C	IP66/67 Housing Industrial Grade Components -40°C to +60°C	IP66/67 Housing Industrial Grade Components -40°C to +60°C	IP66/67 Housing Industrial Grade Components -40°C to +60°C
DO YOU NEED TO OPERATE OVER WATER AND DIFFICULT ENVIRONMENTS?	2x2 MIMO-A and B	2x2 MIMO-A and B	2x2 MIMO-A and B	2x2 MIMO-A and B Spatial Diversity

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ARE THE APPLICATIONS LATENCY-SENSITIVE?	5-7ms	1-3ms	1-3ms	1-3ms
DOES THE CUSTOMER NEED TO PROVIDE TDM E1/T1 SERVICES?	N/A	N/A	Y	Y
DO YOU NEED TO IMMEDIATELY AUTHENTICATE YOUR DEVICES WHEN ENTERING THE NETWORK?	Built-in authentication using RADIUS	Built-in authentication using RADIUS	Built-in authentication using RADIUS	Built-in authentication using RADIUS
WHAT IS THE MAXIMUM RANGE THAT YOU NEED FOR NLOS AND LOS (mi/km)?	LOS - 40/64 NLOS - N/A	LOS - 124/200 NLOS - 5/8	LOS/NLOS - 1.25-2 (SW upgrade)	LOS - 124/200 NLOS - 5/8
DO YOU REQUIRE SECURE DATA TRANSMISSION?	56-bit DES 128-bit AES	128-bit AES	128/256-bit AES	128/256-bit AES
DO YOU REQUIRE HIGH MODULATION RATE FOR YOUR BANDWIDTH INTENSE SERVICES?	Up to 256 QAM	Up to 256 QAM - 13 modulation levels	Up to 256 QAM - 13 modulation levels	Up to 256 QAM - 13 modulation levels
DO YOU WANT TO SECURE THE MANAGEMENT INTERFACES?	N/A	https/ SNMPv3	https/ SNMPv3	https/ SNMPv3
DSO/ON-LINE SPECTRUM ANALYZER FEATURE - SW UPGRADE	N/A	Y	Y	Y
DOES MY CUSTOMER REQUIRE IPV6 MANAGEMENT?	N/A	Y	Y	Y
SYNCHRONOUS ETHERNET FEATURE TO SUPPORT FREQUENCY SYNC - SW UPGRADE	N/A	N/A	Built-in	Optional SW License
1588 V2 FEATURE TO SUPPORT TIME SYNC - SW UPGRADE	N/A	N/A	Built-in	Optional SW License
TDD SYNC FEATURE TO SUPPORT DENSE DEPLOYMENTS	Y	Y	Y	Y
DO YOU NEED SMALL FORM FACTOR AND FLEXIBLE MOUNTING FOR YOUR APPLICATIONS?	Small form factor integrated antenna	Small form factor integrated antenna	Small form factor integrated antenna	N/A
LINKPLANNER SUPPORT	Y	Y	Y	Y