



CANOPY WIRELESS BROADBAND ACCESS NETWORKS

Cambium Networks provides world-class wireless broadband and microwave solutions for service providers and network operators around the world. Our innovative technologies provide reliable, secure, cost-effective connectivity that is easy to deploy and built to last.

Canopy Access Networks offer interference tolerant, scalable networks for data, voice and video applications. Canopy solutions are proven with 4 million modules deployed in thousands of networks around the world.

What Makes Canopy Solutions Different:

- Low cost, low complexity, low maintenance infrastructure with most applications being installed in days and showing a return on investment in months.
- **Supports video, voice, data and control applications** for file transfer, web browsing, leased line replacement, video surveillance, business and residential connectivity.
- **Purpose built for fixed outdoor applications** and outperforms WiFi-based systems in harsh and noisy outdoor conditions.
- **GPS Synchronization to scale from small networks to region wide deployments** so that networks can grow gracefully as subscribers are added and demand for broadband continues to rise.
- **Consistent and predictable throughput** so that customers experience the speeds they expect and are satisfied.
- **Low 3 ms latency** so that sensitive applications like video, gaming and voice services satisfy demanding customers.
- **High Spectral efficiency of 4.5 Mb per Hz** providing the highest usable throughput in the smallest channel so that networks operate reliably in limited spectrum.
- No Subscriber Module Left Behind with PMP 450 interoperability with 100 and 430 series SM's.
- **Rapid deployment in days** enabling network operators to rapidly extend broadband connectivity when and where it is needed.

Proven Access Network Solutions												
Product	PMP 105	PMP 130	PMP 320	PMP 400	PMP 430	PMP 450						
Design Focus	Budget	Cost Effective	802.16e	Public Safety	High	High						
	Small Networks	Large Networks	Fixed Outdoor		Performance	Performance						
					Large Networks	Large Networks						
AP Throughput	14 Mbps	14 Mbps	48 Mbps	20 Mbps	50 Mbps	90 Mbps						
Spectrum (GHz)	900 MHz, 2.4,	900 MHz, 2.4,	3.3, 3.5, 3.6	4.9	5.4, 5.8	5.4, 5.8						
	5.2, 5.4, 5.8	5.1, 5.2, 5.4,										
		5.8, 5.9, 6.05										

For more information visit www.cambiumnetworks.com.





ORTHOGON POINT-TO-POINT BACKHAUL LINKS

Cambium Networks provides world-class wireless broadband and microwave solutions for service providers and network operators around the world. Our innovative technologies provide reliable, secure, cost-effective connectivity that is easy to deploy and built to last.

Orthogon PTP backhaul links offer a wide range of PTP solutions to address an array of radio frequencies, applications, environments, infrastructures and budgets. Our solutions are built to last with a combined total of more than 3 billion field hours in operation.

What Makes Orthogon PTP Solutions Different:

- **High performance** to perform reliably in virtually any path conditions, including non-line-of-sight and long-range line-of-sight, over water and desert terrain, even in severe weather conditions.
- Multiple-Input Multiple-Output (MIMO) the only backhaul products with MIMO technology.
- Intelligent Orthogonal Frequency Division Multiplexing (i-OFDM) resists interference and signal fading.
- Adaptive Modulation to provide the maximum throughput with highest link quality.
- Advanced Spectrum Management with i-DFS to automatically switch to the clearest channel.
- **High Spectral Efficiency** provides high throughput with minimal spectrum usage.
- **PTP LinkPlanner tool** provides a graphical representation of the link path along with configuration details such as link configuration description, antenna height and maximum power and a performance summary such as link loss, data rates and link reliability.
- **Investment Protection** PTP 810 supports TDM today and enables IP to provide smooth migration without replacing equipment.
- Rapid deployment in hours enabling network operators to rapidly extend broadband connectivity when and where it is needed.

Reliable, Secure, High-Performance Backhaul												
	PTP 100	PTP 200	PTP 230	PTP 250	PTP 500	PTP 600	PTP 800	PTP 810				
	Unlicensed	Licensed	Unlicensed	Unlicensed	Unlicensed	Licensed &	Licensed	Licensed				
						Unlicensed						
Design	Budget	Budget	Budget	Cost	High Performance							
Focus	Short Links	Short Links	Short Links	Effective								
				Short Links								
Usable	14 Mbps	21 Mbps	50 Mbps	256 Mbps	105 Mbps	300 Mbps	368 Mbps	700 Mbps				
Throughput								full duplex				
Spectrum	2.4, 5.2,	4.9	5.8	5.4, 5.8	5.4, 5.8	2.5, 4.5,	6 - 38	6 - 38				
(GHz)	5.4, 5.8					4.8, 4.9,						
						5.4, 5.8, 5.9						

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