

ORiNOCO® QB-9100 Series

Access Point with built-in Backhaul



Proxim introduces the ORiNOCO® Quickbridge® 9100, the first wireless solution that combines a 2.4 GHz Access Point and 5 GHz Backhaul

ORiNOCO® Quickbridge® 9100 takes advantage of Proxim's expertise in both Wi-Fi and long haul point-to-point systems to deliver a 2.4 GHz 802.11n Access Point with a built-in 5 GHz high capacity backhaul solution.

With dual radio support, one for Wi-Fi and one for high capacity backhaul the, ORiNOCO® QB-9100 is ideal for Carriers who need wireless backhaul for their 3G/4G small cell and can have the backhaul and Wi-Fi offload in a single unit. ORiNOCO® QB-9100 also offers new capability to Video Protection or ITS network by providing operators with secure Wi-Fi access to information from the unit while in the field, on standard Wi-Fi devices.

ORiNOCO® Quickbridge® 9100 leverages the benefits of OFDM, MIMO radio innovations and Proxim's proprietary Wireless Outdoor Routing Protocol (WORP®) to provide wireless performance in excess of 4G or Wi-Fi based backhaul products today.

World Class Performance

- 802.11b/g/n Wi-Fi certified Access Point that delivers 300 Mbps data rate
- Point-to-Point Backhaul that delivers 866 Mbps data rate at distances of over 5 miles (8 km)
- Very low latency of 2 to 3 ms to support voice and video applications over long distances
- Dual IPv4 and IPv6 stack for transparent evolution to tomorrow networks
- Built-in feature rich network protocols for bridging, routing and gateway functionality

Highly Secure

- Implements AES encryption and Radius authentication for secure outdoor wireless communications
- Secure management (SSL/TLS1.2, SSH and SNMPv3) preventing unwanted configuration changes

Advanced Features

- Features dual Gigabit Ethernet ports with PoE out to power other devices such as surveillance cameras or additional radios
- Supports Deep packet inspection to create unique and sophisticated service rules and tiered service classes with ease
- Compatibility with LACP switches for link aggregation
- Built in spectrum analyzer to scan frequency bands for interference, and select a channel appropriately

Carrier-Grade Backhaul

- Features Ethernet ports with IEEE 1588v2 synchronization and support for Jumbo frames
- Public HotSpot integration with Home Page redirect and Walled Garden
- HotSpot 2.0 to automatically discover and seamlessly authenticate to public Wi-Fi networks

Unparalleled Flexibility and Convenience with Centralized Management

- ProximVision® Advanced supports ORiNOCO® QB-9100 giving network architects unparalleled flexibility and control of the units
 - Rapid Network Deployment: Automates configuration processes for faster, more efficient deployment of Proxim Wireless networks
 - Advanced Configuration Capabilities: Gives network managers an option for exhaustive device configuration with a software-based tool
 - Greater Ease of Use and Upgradability: Supports a greater number of devices than competitively priced solutions and provides the simplest path to configuration and upgrade

PRODUCT MODELS							
QB-9100		ORINOCO® QB-9100, MIMO 2x2, 802.11g/n AP with link, 867 Mbps, MIMO 2x2, Type-N Connectors					
QB-9150		ORINOCO® QB-9150, MIMO 2x2, 802.11g/n AP with link, 867 Mbps, MIMO 2x2, 22 dBi panel					
INTERFACES							
WIRED ETHERNET		Two auto MDI-X RJ45 10/100/1000Mbps Ethernet - Port #1 with PoE in & Data			- Port #2 with PoE out & Data		
WIRELESS PROTOCOL		- Radio #1: WORP®			- Radio #2: 802.11b/g/n (Remote end only)		
RADIO				Radio #1		Radio #2 (Remote end only)	
FREQUENCY		5.150 – 5.925 GHz (Subject to Country Regulations)			2.400 – 2.484 (Subject to Country Regulations)		
					802.11n		802.11g
							802.11b
MIMO		2x2:2			2x2:2		N/A
MODULATION		OFDM BPSK - QAM256			OFDM BPSK - QAM64		OFDM BPSK-QAM64
DATA RATE		Up to 866 Mbps			Up to 300Mbps		Up to 54Mbps
					Up to 11Mbps		
TX POWER		80 MHz			40 MHz		20 MHz
		MCS0: 28			MCS0: 28		MCS0: 29
		MCS9: 21			MCS9: 22		MCS8: 25
RX SENSITIVITY (BER=10 ⁻⁶)		MCS0: -89			MCS0: -93		MCS0: -94
		MCS9: -68			MCS9: -71		MCS8: -74
OTHER		Dynamic Channel Selection (DCS) based on interference detection Dynamic Frequency Selection (DFS) based on radar signature Automatic Transmit Power Control (ATPC) with EIRP limit support			Automatic Channel Selection (ACS)		
ANTENNA				Radio #1		Radio #2 (Remote end only)	
QB-9100		Two N-type Connectors with built-in Surge Protection			Two N-type Connectors with built-in Surge Protection		
QB-9150		Integrated 2x2 MIMO 22dBi Dual Polarized 1 foot Panel Antenna			Two N-type Connectors with built-in Surge Protection		
SECURITY				Radio #1		Radio #2 (Remote end only)	
ENCRYPTION		AES 128			802.11i/WPA2 and WPA Wireless Security with AES-128, TKIP or WEP		
AUTHENTICATION		Internal MAC Address Control List, Radius based Authentication			Enterprise/802.1x, Personal/ PSK (Pre Shared Key) or Open		
802.1X SUPPORT					PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-TTLS, EAP-AKA		
QOS				Radio #1		Radio #2 (Remote end only)	
		Asymmetric UL/DL CIR (committed) and MIR (maximum) information rate per service flow with Best Effort and Real Time Polling Services			802.11e/WMM Enhanced Distributed Channel Access, 4 priority queues		
Packet Classification Capabilities		802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType			802.1p priority, IPTOS		
THROUGHPUT				Radio #1		Radio #2 (Remote end only)	
		Up to 633 Mbps @ 80 MHz			Up to 150 Mbps		
MANAGEMENT							
REMOTE		Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3					
SNMP		SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB					
OTHER		Syslog, sFlow™ agent, SNTP and local time, Spectrum analyzer					
SYNCHRONIZATION							
		IEEE 1588v2 Ethernet Synchronization					
NETWORK				Radio #1		Radio #2 (Remote end only)	
MODES		Bridging (support LACP through external switches), Routing (RIP v2 and IP tunneling)			Access Point		
IP STACK		IPv4 and IPv6 simultaneously					
GATEWAY FEATURES		DHCP Server & relay, NAT with Std ALGs					
VLAN		802.1Q: Management VLAN, Transparent, Access, Trunk and Mixed mode. QinQ double tagging					
POWER				INPUT		OUTPUT	
		36 to 57 VDC via Ethernet port1 (Power over Ethernet) (PoE)			48 to 57 VDC – 25 Watt max on Ethernet port2 (PoE – software controlled)		
		12 VDC via Access port			12 VDC on Access port		
		Power should not be provided simultaneously on both ports.					
POWER CONSUMPTION							
		Local end: 14 Watt typical, 17.5 Watt maximum, remote end 16.5 Watt typical, 22.5 Watt maximum					
ENVIRONMENTAL SPECS							
OPERATING TEMPERATURE		-40° to 60°C (-40° to 140° Fahrenheit)					
STORAGE TEMPERATURE		-50° to 70°C (-58° to 158° Fahrenheit)					
HUMIDITY - IP RATING		100% relative humidity - IP67					
WIND LOADING		180 km/h (112.5 mph)					
PHYSICAL SPECS			DIMENSIONS			WEIGHT (Local / Remote end)	
PACKAGED (per unit)		QB-9100			14.56 x 13.0 x 7.87 in (370 x 331 x 200 mm)		
		QB-9150			14.56 x 13.0 x 7.87 in (370 x 331 x 200 mm)		
UNPACKAGED (per unit)		QB-9100			9.84 x 8.66 x 2.83 in (250 x 220 x 72 mm)		
		QB-9150			12 x 12 x 3.40 in (305 x 305 x 85 mm)		
SAFETY STANDARDS							
		UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)					
CERTIFICATIONS							
		USA: FCC 90Y + 15C + 15E (UNII 15.247); Canada: IC RSS 102 + RSS 111 + RSS 247; Europe: RED EN 301 489-1 + EN 301-489-17 + EN 300 328 + EN 301 893 + EN 302 502					
PACKAGE CONTENTS							
				• One ORINOCO® QB-9100 link with two (local) / four four (remote) N-type surge protected connectors Or One ORINOCO® QB-9150 link with integrated 22 dBi panel antenna (local and remote) plus Two N-type surge protected connectors (remote only)		• Two 2.4 GHz, 5 dBi omni antennas	
				• Two power injector and country specific power cord		• Two Grounding kit	
				• Two Connector weatherproofing kit (Includes all recommended weatherproofing material)		• One Antenna alignment (RJ11) dongle	
						• One Quick Installation Guide	
						• Two Wall / Pole mounting kit	
MTBF and WARRANTY							
		>250 000 hours, 2-year; ServPak Extended Support available.					