

Wireless Ethernet 60 GHz Links Mobile Backhaul and Campus Networks

HaulPass™ 1000



1 Kilometer Range
3.9 kg (8.5 pounds)
Antenna beamwidth 3.5°

HaulPass™ 2000



2 Kilometer Range
6.5 kg (14.3 pounds)
Antenna beamwidth 1.2°

- Full Duplex, Wireless Gigabit Ethernet (GigE)
- Power over Ethernet (802.3at POE+ compliant)
- Less than 16W power consumption
- Weatherized, compact, and easy to install
- 10/100/1000BaseT Full Duplex 802.3 compliant
- Jumbo frame support up to 10 kbyte
- Rich Ethernet layer-2 functionality
- RJ-45 weather sealed connector
- Surge protected
- Multiple network management formats (web server with GUI, Telnet/SSH, SNMP)
- In-band remote terminal management
- Optional remote beam steering capability

Technical Data

Power Requirements	<16W IEEE 802.3at POE+ compliant
Carrier Frequencies	58.32 GHz, 62.64 GHz (North America, Korea) 60.48 GHz, 64.80 GHz (Japan, Europe)
Channel Bandwidth	250 MHz
Modulation	QPSK, with FEC
Polarization	V (H polarization also available)
Operating Temperature	-40 to 60 °C (-40 to 140 °F)
Mount	1/4-20, 3/8-16 hole pattern
Ethernet Interface	10/100/1000BASE-T full duplex Ethernet throughput 634 Mbps (317 Mbps full duplex) RJ-45 IEEE 802.3 compliant Auto-negotiation, MDI/MDI-X Surge protected Address learning, aging and lookup Internal Ethernet switch with frame forwarding QOS support Up to 10 kB jumbo frame support
Network Management	HTTP web server with GUI client Telnet / SSH SNMP, alarm reporting and traps

This equipment is subject to FCC rules and will comply with the rules before delivery to a commercial buyer

Applications

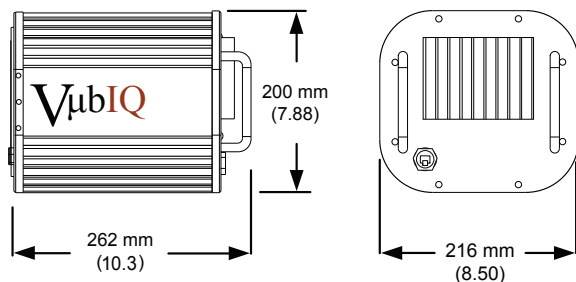
- Mobile backhaul
- LAN network extension
- Campus networks
- Enterprise networks
- Redundancy networks
- Temporary networks
- Disaster recovery networks

Features

- 60 GHz unlicensed operation
- 10/100/1000BASE-T link
- Global spectrum allocation
- Very high frequency reuse
- Physical layer security

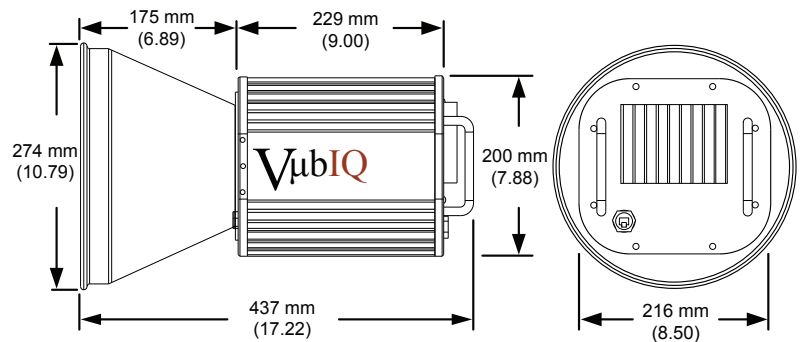
HaulPass™ 1000

Antenna Beamwidth	3.5°
Size	262 mm (10.3") L 216 mm (8.5") W 200 mm (7.88") H
Weight	3.9 kg (8.5 lbs)



HaulPass™ 2000

Antenna Beamwidth	1.2°
Size	437 mm (17.22") L 216 mm (8.5") W 200 mm (7.88") H 274 mm (10.79") Antenna Diameter
Weight	6.5 kg (14.3 lbs)



Preliminary - Specifications Subject to Change Without Notice v.1.8