

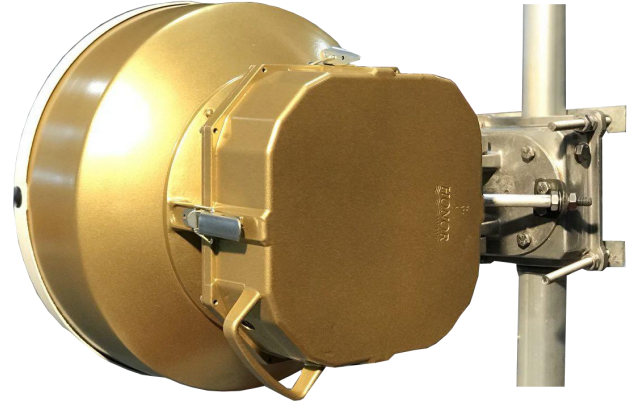
HW8000-HP

8 GHz

900 Mbps

Full Duplex

Technical Sheet



Specifications

Main Features

Model Number	HW8000-HP
Frequency bands	8 GHz
Channel bandwidth	3.5 to 112 MHz
Modulation scheme	QPSK to 1024 QAM
Transmission capacity	Up to 900 Mbps full duplex (up to 1.8 Gbps full duplex for 2+0)
Gigabit Ethernet interface, 2x electric, 1x optical	
Low latency	< 0.09 ms for 900 Mbps
Hitless adaptive coding and modulation (ACM)	
Automatic transmit power control (ATPC)	
Built-in spectrum analyzer	
System configuration	1+0, 1+1 or 2+0
Full overvoltage protection	
All outdoor design	

Ethernet Features

MTU Up to 10240 Bytes

QoS support (VLAN p-bit, DSCP, port priority)

Full support of VLAN and QinQ(802.1Q, 802.1ad)

Two independent Ethernet lines through radio link

Ethernet port shutdown when the radio link is bad

Management system

Proprietary network management system

In-band/out-of-band management

Independent diagnostic channel

SNMP protocol

Built-in graphs and statistics

Typical applications

WiMAX/LTE/4G backhaul

LAN/MAN/WAN

IPTV and CCTV distribution

B2B connections

Multimedia applications

Last miles



General	
Operating frequency range (GHz)	7.725-8.5
TX/RX spacing (MHz)	119-311
Channel spacing (MHz)	3.5-112
Capacity full duplex (Mbps)	5-900
Latency (ms)	< 0.09 for 900 Mbps
Modulation	QPSK/8/16/32/64/128/256/512/1024 QAM
Frequency stability	< 10 ppm
Forward error correction	Reed Solomon FEC and convolutional inter leaver
System configuration	1+0, 1+1 SD/FD or 2+0
Radio	
TX power max (dBm)	23
ATPC	Yes
ACM	Hitless ACM with possibility of asymmetric operation
Interface	
1-2x 1000Base-T, 1x 1000Base-SX/LX/BX10	
Management	
In-band/out of-band management, Ethernet interface/RS-232 Advanced management system ASD/SNMP v1	
Ethernet	
Flow Control Qos (802.1p), VLAN (802.1Q), QinQ(802.1ad), MTU 10240 B	
Antennas	
0.35 m mid band gain (dBi)	28
0.65 m mid band gain (dBi)	31.5
0.9 m mid band gain (dBi)	35
1.2 m mid band gain (dBi)	37
Class	PRE Class 2 or Class 3
Polarization	V/H
Large diameter antennas	Other producers possible waveguide connection



Power supply and cabling	
Range (V)	48 DC (36 up to 72), floating ground
Power consumption (W)	37
ODU connection	S-STP/S-FTP Cat.7 cable up to 100 m length/optical fiber
Operating temperature	
ODU (°C)	-35 up to +55
Protected terminal box (°C)	-25 up to +55