



AL Wireless

2.6 Gbps
full duplex

ZENITH C

Ultra-high capacity solution

Main features

- Frequency bands 71–76 and 81–86 GHz
- Output power up to 20 dBm
- Modulation scheme QPSK to 256 QAM
- Transmission capacity up to 2.6 Gbps full duplex (3.2 Gbps over air)
- 2.5 Gigabit Ethernet interface, 1× SFP slot
- Gigabit Ethernet interface, 1× electric, 1× SFP slot
- SyncE and IEEE 1588v2
- Low latency
- Hitless adaptive coding and modulation (ACM)
- Automatic transmit power control (ATPC)
- Full overvoltage protection
- All Outdoor design

Ethernet features

- MTU up to 9600 Bytes
- MEF 2.0
- G.8032 support
- RMON statistic
- Packet Fragmentation to minimize jitter
- Carrier Ethernet protocol stack

Management system

- Proprietary GUI management system
- In-band/out-of-band management
- SNMP protocol

Typical applications

- **Mobile RAN networks:**
 - 4G/LTE/WiMAX macro-cell
 - backhaul for access and aggregation
 - CPRI front haul 2.5 Gbps
- **Internet service providers:**
 - Backbones
- **Fixed line access networks:**
 - Last Mile fiber extension



ZENITH C Ultra-high capacity solution

General				
Operating frequency range (GHz)	71-76/81-86			
TX/RX spacing (MHz)	10000			
Channel spacing (MHz)	250/500			
Modulation	QPSK/16/32/64/128/256 QAM			
Capacity full duplex (Mbps)	250 MHz/QPSK	250 MHz/256 QAM	500 MHz/QPSK	500 MHz/256 QAM
	325	1300	633	2600
Frequency stability	< 10 ppm			
Forward error correction	Reed-Solomon FEC			
Radio				
RX sensitivity BER = 10 ⁻⁶ (dBm)	250 MHz/QPSK	250 MHz/256 QAM	500 MHz/QPSK	500 MHz/256 QAM
	-71	-51	-68.5	-49
TX power max. (dBm)	20	12	20	12
ATPC	Yes			
ACM	Hitless ACM			
Interfaces				
	1x 1000Base-T, 1x SFP slot 2500Base-X, 1x SFP slot 1000Base-SX/LX/BX10			
Management				
	In-band/out-of-band GUI, SNMPv1, SNMPv2, SNMPv3			
Ethernet				
	MEF 2.0, VLAN, QinQ, G.8032, MTU 9600 B			
Antennas				
0.35 m mid band gain (dBi)	45.5			
0.65 m mid band gain (dBi)	51			
Class	RPE Class 2 or Class 3			
Polarization	V/H			
Power supply and cabling				
Range (V)	48 DC			
Power consumption (W)	40			
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			
ODU / Terminal box dimensions and weight				
Width x Height x Depth (cm)	22 x 33 x 12 / 14.7 x 16.3 x 4.4			
Weight (kg)	5.9 / 0.5			

For more technical information please see www.al-wireless.com.



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