ALCOMA AL..F MP

Wireless Ethernet Solution

The Easiest
The Fastest
The Most Complex

4–24 GHz | **900 Mbps**
966 for MTU 64 B

Features

- Frequency bands 4–24 GHz
- License exempt 5, 17 and 24 GHz*
- Transmission capacity up to 900 Mbps, 1.8 Gbps for 2+0 configuration
- Gigabit Ethernet Optical / Electrical interface
- Jumbo packets up to 10,240 Bytes
- Modulation type QPSK to 1024 QAM
- Hitless adaptive coding & modulation
- Forward error correction (FEC)
- Automatic TX power control (ATPC)
- All-Outdoor design with antennas 0.35, 0.65, 0.9 or 1.2 m
- Full overvoltage protection of ODU unit

* SRD equipment

Management

- Proprietary network management system ASD
- Software configurable
- Independent diagnostic channel
- SNMP protocol
- WEB interface
- SQL database
- Command line interface
- System configuration 1+0, 1+1 or 2+0

Applications

- Local / Metropolitan / Wide area networks
- IPTV distribution
- Multimedia applications
- Last miles

Ethernet

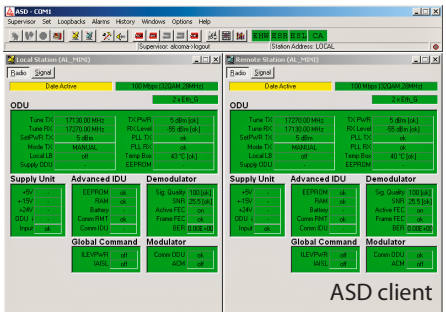
- QoS support (VLAN p-bit / DSCP / port priority)
- Full support of VLAN and QinQ (802.1Q, 802.1ad)
- Two independent Ethernet lines through radio link
- Ethernet port shutdown when the radio link is bad

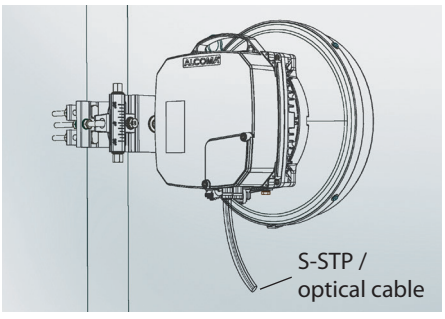
Protected Terminal Box

- Full overvoltage protection
- Optional redundant power feeding
- DIN rail or rack mount compatible
- Compact 1U rack unit for 3 terminal boxes

ODU with antenna

Compact 1U rack unit for 3 terminal boxes


ASD client


S-STP / optical cable

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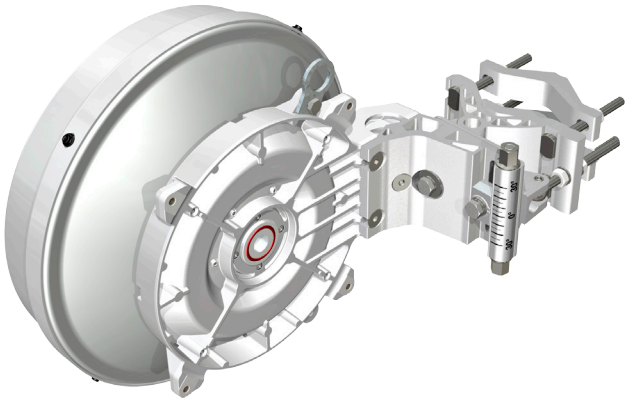

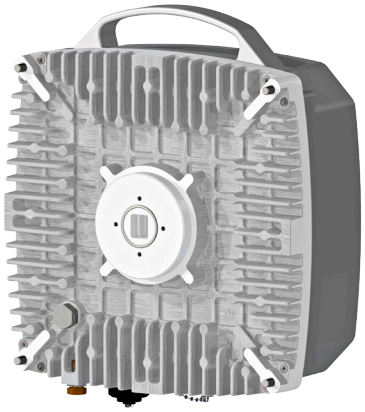

General	4/5 GHz	6 GHz	7 GHz	8 GHz	10 GHz	11 GHz	13 GHz	18 GHz	17 GHz	24 GHz
									License exempt	
Operating Frequency Range (GHz)	3.4–6.2	5.85–7.125	7.11–7.9	7.725–8.5	10.0–10.68	10.7–11.7	12.75–13.25	17.7–19.7	17.1–17.3	24.0–24.25*
TX / RX Spacing (MHz)	100–320	150–340	154–245	119–311	91/168/350	490/500/530	266	1010/1560	–	–
Channel Spacing (MHz)	3.5–112								3.5–80	3.5–112
Capacity (Mbps)	5–900								5–660	5–900
Capacity for MTU 64 B (Mbps)	5–966								5–764	5–966
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 Interleaver									
System Configurations	1+0, 1+1 SD/FD or 2+0									
Radio										
TX Power max. (dBm)	23/18	23	23	23	9	24	24	23	SRD 20 EIRP (12 dBm max.)	
Automatic Transmit Power Control	ATPC									
Adaptive Coding & Modulation	ACM / Hitless ACM									
Interfaces										
	1–2× 1000Base-T, 1× 1000Base-SX/LX/BX10									
Management										
	In band / out of band management, Ethernet / RS-232 interface, Advanced management system ASD / SNMP v1									
Ethernet										
	Flow Control, QoS (802.1p), VLAN (802.1Q), QinQ (802.1ad), MTU 10240 B									
ALCOMA Antennas										
0.35 m Mid Band Gain (dBi)	–	–	–	–	29	29	30	33	32.5	35.5
0.65 m Mid Band Gain (dBi)	–	29.5	30.5	31.5	34	34.5	35.5	38.5	38	41
0.9 m Mid Band Gain (dBi)	–	33	34	35	37	38	39	42	41.5	44
1.2 m Mid Band Gain (dBi)	–	35	36	37	39.5	40	41	44	43.5	46
Class	RPE Class 2 or Class 3									
Polarization	vertical or horizontal								dual polarized	
Large Diameter Antennas	from other producers									
Power Supply and Cabling										
Range (V)	36 to 72 DC, floating ground									
Power Consumption (W)	up to 35								up to 25	
ODU connection	S-STP / S-FTP Cat.7 cable up to 100 m length / otical fiber									
Operating Temperature										
ODU (°C)	–35 to +55									
Protected Terminal Box (°C)	–25 to +55									
ODU / Terminal box Dimensions and Weight										
Width × Height × Depth (cm)	25.5 × 30.1 × 13.3 – 25.5 × 30.9 × 17.5 / 14.7 × 16.3 × 4.4									
Weight (kg)	5.1 – 6.7 / 0.5									

* SRD equipment | ver. 150310

For more technical information please see www.alcoma.com.

TÜV SÜD ISO 9001

ALCOMA

ALCOMA, the Czech company founded in 1993, is a leading designer and producer of point-to-point microwave and millimeter wave radio relay links. All production is manufactured in its own factories in Prague and Kolin.

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