AL Wireless

ALxxF MP400

Wireless Ethernet solution

Main features

- Frequency bands 4, 5, 6, 7, 8, 10, 11, 13, 17, 18 and 24 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, 2× electric, 1× 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

www.al-wireless.com

AL Wireless is ALCOMA exclusive distributor in the following territories:

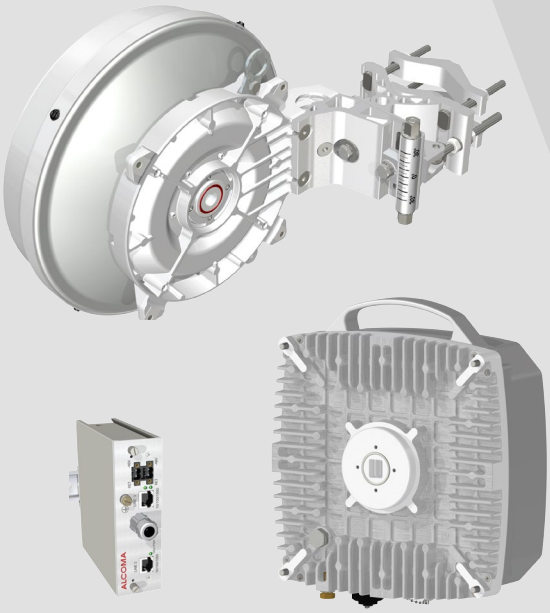
Belgium, Belorussia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Canada, Croatia, Iraq, Ireland, Italy, France, Germany, Guinea, Guinea-Bissau, Kenya, Lesotho, Lebanon, Liberia, Lithuania, Latvia, Hungary, Macedonia, Malawi, Montenegro, Mozambique, Namibia, Netherlands, Philippines, Portugal, Romania, Serbia, Sierra Leone, Slovenia, South Africa, Spain and Canary Islands, Sudan, Swaziland, Syria, Tanzania, UAE, Ukraine, USA ,Uzbekistan, UK, Zimbabwe

ALxxF MP400 Wireless Ethernet solution

General	4 GHz	5 GHz	6 GHz	7 GHz	8 GHz	10 GHz	11 GHz	13 GHz	17 GHz	18 GHz	24 GHz
Operating frequency range (GHz)	3.4–4.2	4.4–5.875	5.85–7.125	7.11–7.9	7.725–8.5	10.0–10.68	10.7–11.7	12.75–13.25	17.1–17.3	17.7–19.7	24.0–24.25
TX/RX spacing (MHz)	100–320	150–312	150–340	154–245	119–311	91/168/350	490/500/530	266	110–190	1010/1560	134–240
Channel spacing (MHz)	3.5–112	3.5–112	3.5–112	3.5–112	3.5–112	3.5–56	3.5–112	3.5–112	3.5–80	3.5–112	3.5–112
Capacity full duplex (Mbps)	5–900	5–900	5–900	5–900	5–900	5–500	5–900	5–900	5–660	5–900	5–900
Capacity for MTU 64 B (Mbps)	5–966	5–966	5–966	5–966	5–966	5–576	5–966	5–966	5–764	5–966	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	3/9	24	24	12 *	23	5 *
ATPC	Yes										
ACM	Hitless ACM with possibility of asymetric operation										
Interfaces											
	1–2× 1000Base-T, 1× 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)	–	–	–	–	–	29	29	30	32.5	33	35.5
0.65 m mid band gain (dBi)	–	–	29.5	30.5	31.5	34	34.5	35.5	38	38.5	41
0.9 m mid band gain (dBi)	–	–	33	34	35	37	38	39	41.5	42	44
1.2 m mid band gain (dBi)	–	–	35	36	37	39.5	40	41	43.5	44	46
Class	RPE Class 2 or Class 3										
Polarization	V/H	V/H	V/H	V/H	V/H	V/H	V/H	V/H	Dual	V/H	Dual
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)	35	35	35	37	37	22	35	35	25	35	27
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 × Height × Depth (cm)	From 25.5 × 30.1 × 13.3 to 25.5 × 30.9 × 17.5 / 14.7 × 16.3 × 4.4										
Weight (kg)	From 5.1 to 6.7 / 0.5										

** SRD 20 dBm EIRP*

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



In order to achieve excellence providing services in point-to-point radio relay links integrated with other technologies, bring better support and more complex solutions to various countries, AL Wireless a.s. was started in 2015 by splitting off the foreign trade and customer support department from ALCOMA a.s., the worldwide known producer of microwave technology from the Czech Republic.

AL Wireless a.s.
Sokolská 1605/66, Nové Město
120 00 Praha 2
Czech Republic

phone: +420 228 226 500
e-mail: info@al-wireless.com
web: www.al-wireless.com