

# ALCOMA AL..FMP

Free Bands 5-17-24 GHz  
384 Mbps

## 4-24 GHz | 384 Mbps

### Features

- ▲ Frequency bands 4-24 GHz
  - ▲ License free 5, 17 and 24 GHz\*)
  - ▲ Transmission capacity up to 384 Mbps
  - ▲ Gigabit Ethernet & Fast Ethernet
  - ▲ All Outdoor link
  - ▲ Full overvoltage protection
  - ▲ Modulation type QPSK to 256 QAM
  - ▲ Software configurable
  - ▲ Adaptive coding & modulation (ACM)
  - ▲ Forward error correction (FEC)
  - ▲ Automatic TX power control (ATPC)
  - ▲ Network management system (NMS) with SQL database
  - ▲ IP-STACK with SNMP protocol
  - ▲ Antennas 0.3, 0.6, 0.9 and 1.2 m
- \*) SRD equipment

### Description

ALCOMA AL..F version MP is compact, easy to deploy and cost effective radio relay link suitable for both last miles and backbone links. It can be used for interconnecting PBXs and building LANs, MANs and WANs. AL..F MP covers the 4-24 GHz frequency bands with speed up to 384 Mbps. AL5F MP, AL17F MP and AL24F MP are license free links working in 5, 17 and 24 GHz\*) bands.

The link supports electrical or fiber optic Fast & Gigabit Ethernet. The whole link is built into outdoor unit. The indoor overvoltage protected terminal box with the grounding bolt is used instead of IDU. Three ODUs can be connected to one indoor overvoltage

protected terminal box. ODU is connected to the terminal box using one up to 100 m long S-STP Cat.7 cable, or fiber optic cable. Integrated High Performance antenna systems with diameter 0.3, 0.6, 0.9 or 1.2 m can be supplied.

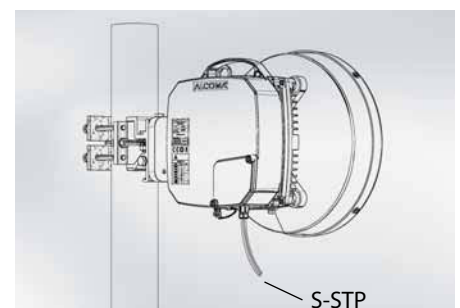
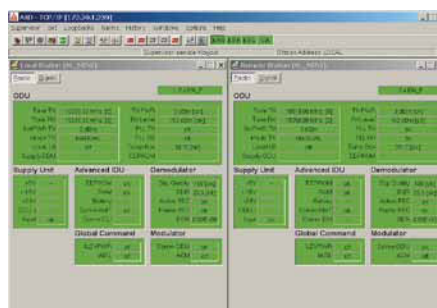
AL..F MP incorporates powerful Trellis Coded Modulation with Concatenated Reed-Solomon error correction to ensure low residual BER and high signal quality under all weather conditions. SNMP protocol ver. 1, WEB interface, command line interface and proprietary network management system ASD with SQL database can be used for remote diagnostics and maintenance.



compact ODU



Overvoltage Protected Terminal Box



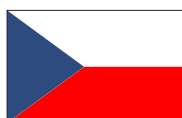
S-STP

# ALCOMA

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General	4-5 GHz	6 GHz	7 GHz	11 GHz	13 GHz	18 GHz	17 GHz	24 GHz	
								License Free	
Operating Frequency Range (GHz)	4.1-6.2	6.4-7.1	7.1-7.8	10.7-11.7	12.75-13.75	17.7-19.7	17.1-17.3	24.0-24.25*)	
TX / RX Spacing (MHz)	186	340	161	490, 530	266	1,010	-	-	
Channel Spacing (MHz)	7 / 14 / 28 / 40 / 56	7 / 14 / 28 / 56	7 / 14 / 28 / 56	28 / 40 / 56	7 / 14 / 28 / 56	7.5 / 13.75 / 27.5 / 55	7 / 14 / 28 / 56	7 / 14 / 28 / 56	
Capacity (Mbps)	up to 384	up to 372					up to 384		
Modulation	QPSK / 16 / 32 / 64 / 128 / 256 QAM								
Frequency Stability	< 10 ppm								
Forward Error Correction	Trellis Coded Modulation with Concatenated Reed-Solomon error correction								
System Configurations	1+0, 2+0								
<b>Radio</b>									
TX Power max. @256QAM (dBm)	20	20	20	23	23	17	SRD 20 EIRP (5 dBm max.)		
Automatic Transmit Power Control	ATPC								
Adaptive coding & modulation	ACM								
<b>Interfaces</b>									
	2x 100Base-TX / 2x 1000Base-T, connector RJ-45 VLAN packets up to 10,240 bytes Auto Negotiation, or manual setting 1000 / 100 / 10 Full / Half Duplex, Flow Control, Auto MDIX, Master / Slave Option: fiber optic 1000Base-SX or 1000Base-LX								
<b>Management</b>									
	Diagnostic channel with Ethernet / RS-232 interface Proprietary Network Management System ASD SNMP protocol ver. 1								
<b>Antennas</b>									
0.3m gain (dB)	-	-	-	28	29	33	33	35	
0.6m gain (dB)	28	30	30	34	35	38	38	40	
0.9m gain (dB)	-	-	-	37	38	41	41	43	
1.2m gain (dB)	34	36	36	40	41	44	44	45	
Class	RPE Class 2 or Class 3								
Polarization	vertical or horizontal						dual polarized		
<b>Power supply</b>									
=48 V	+36 to +72 V								
Power consumption	up to 35 W						25 W		
ODU	S-STP Cat.7 cable up to 100 m length, or fiber optic cable								
<b>Temperature</b>									
ODU	-33 to +55 °C								
Protected Terminal Box	-5 to +55 °C								
<b>Dimensions and Weight</b>									
Dimensions Width x Height x Depth	25.5 x 30.1 x 13.3 cm								
Weight	5,1 kg								

\*) SRD equipment | ver. 110216

**About ALCOMA**

ALCOMA spol. s r. o. is a leading designer and producer of micro-wave radio relay links in the Czech Republic. The company was founded in 1993. All production is manufactured in our own factory in Prague.

alcoma@alcoma.com | www.alcoma.com