



AL Wireless



400 Mbps
525 for MTU 64 B

ALxxF
SDH/PDH/Ethernet solution

Main features

- Frequency bands 4, 5, 6, 7, 8, 10, 11, 13, 15, 17, 18, 23, 24, 26, 28, 32 and 38 GHz
- Transmission capacity up to 400 Mbps, 3.2 Gbps for 8+0 configuration
- 2× Fast or 4× Gigabit Ethernet + 4× SFP, 1–4× STM-1/OC-3, 2–126× E1/T1
- Modulation type QPSK to 256 QAM
- Adaptive coding and modulation (ACM)
- Automatic TX power control (ATPC)
- Cross polarization interference cancellation (XPIC)
- SyncE and IEEE 1588v2
- Standard 1U 19" rack unit for IDU
- ODU-IDU coaxial cable up to 300 m
- ODU-IDU (split) design

Ethernet features

- MTU up to 9728 Bytes
- IEEE 802.1D-2004
- IEEE 802.1Q-2003
- IEEE 802.3ad
- MEF 6, 9, 10.1, 11, 14
- ITU-T Rec. G.8032
- QoS Port-based, 802.1Q VLAN TAG,
- DiffServ, four-level priority queue

Management system

- Built-in web-based GUI
- SNMPv1, SNMPv2, SNMPv3
- Command line interface
- Independent NMS channel
- Software configurable
- System configurations
1+0, 1+1, 2+0, 4+0, 6+0 or 8+0
- IEEE 802.1ag & ITU-T Rec. Y.1731
- OAM complies with IEEE 802.3ah

Typical applications

- WIMAX/LTE/4G backhaul
- LAN/MAN/WAN
- IPTV and CCTV distribution
- B2B connections
- Interconnecting PBXs

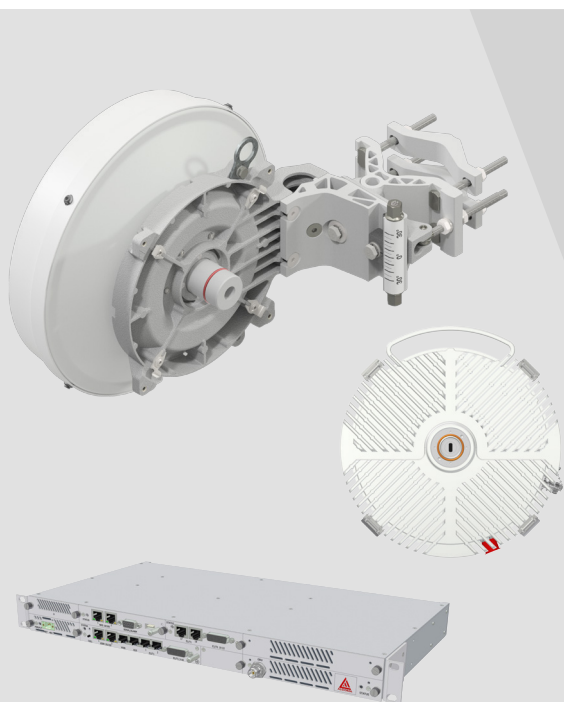


ALxxF SDH/PDH/Ethernet solution

General	4 GHz	5 GHz	6 GHz	7 GHz	8 GHz	10 GHz	11 GHz	13 GHz	15 GHz	17 GHz	18 GHz	23 GHz	24 GHz	26 GHz	28 GHz	32 GHz	38 GHz
Operating frequency range (GHz)	3.4	4.4	5.85	7.11	7.725	10.0	10.7	12.75	14.4	17.1	17.7	21.2	24.0	24.25	27.52	31.8	37.0
	4.2	5.875	7.125	7.9	8.5	10.68	11.7	13.25	15.35	17.3	19.7	23.6	24.25	26.5	29.48	33.4	40.0
TX/RX spacing (MHz)	100	150	150	154	119	91	490	266	315	110	1008	1008	133	800	1008	812	700
	320	312	340	300	360	350	530		728	190	1560	1232	240	1008			1260
Channel spacing (MHz)	3.5-60																
Capacity (Mbps)	5-400																
Capacity for MTU 64 B (Mbps)	5-525																
Modulation	QPSK/16/32/64/128/256 QAM																
Frequency stability	< 10 ppm																
Forward error correction	Reed-Solomon error correction																
System configurations	1+0, 1+1 SD/FD, 2+0, 4+0, 6+0 or 8+0, XPIC																
Radio																	
TX power max. (dBm)	30	18	30	30	30	3/9	28	26	26	12 *	26	25	5 *	25	25	23	23
ATPC	Yes																
XPIC	Yes																
ACM	Yes																
Interfaces																	
	2x 100Base-TX/4x 1000Base-T + 1x SFP/4x 1000Base-T + 4x 1000Base-T/SX/LX/BX10 (SFP Slot), packet length 2048/4000 bytes, optionally 9728 bytes																
	1-4x STM-1/OC-3																
	2/16/18/23/32/37/42/58/63/126x E1 (G.703 2 Mbps)/T1																
	Network management system channel 100Base-TX, data order wire channel 64 kbps RS422/RS232, voice order wire channel, input/output alarm relay ports																
Antennas																	
0.35 m mid band gain (dBi)	-	-	-	-	-	29	29	30	31	32.5	33	35	35.5	36	37	38.5	40
0.65 m mid band gain (dBi)	-	-	29.5	30.5	31.5	34	34.5	35.5	36.5	38	38.5	40.5	41	42	43	44	45
0.9 m mid band gain (dBi)	-	-	33	34	35	37	38	39	40	41.5	42	43.5	44	44.5	-	-	-
1.2 m mid band gain (dBi)	-	-	35	36	37	39.5	40	41	42	43.5	44	45.5	46	47	-	-	-
Class	RPE Class 2 or Class 3																
Polarization	V/H	V/H	V/H	V/H	V/H	V/H	V/H	V/H	V/H	Dual	V/H	V/H	Dual	V/H	V/H	V/H	V/H
Large diameter antennas	Other producers, possible waveguide connection																
Power supply and cabling																	
Range (V)	-39 to -60 DC																
Power consumption (W)	1+0 up to 100, 1+1 and 2+0 up to 150																
ODU-IDU connection	Coaxial cable 50 Ω, RG213 up to 140 m, RT50/20 up to 240 m, N and TNC connector																
Operating temperature																	
ODU (°C)	-35 up to +55																
IDU (°C)	-5 up to +50																
ODU / IDU Dimensions and weight																	
Width x Height x Depth (cm)	From 25.5 x 30.1 x 13.3 to 25.5 x 30.9 x 17.5 / 48.2 x 23.9 x 4.4																
Weight (kg)	From 4.6 to 6.7 / from 2.7 to 3.4																

* SRD 20 dBm EIRP

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



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