



ALB128 Series

Klassic 8W Ku Band IFL
Block-Up Converter

Suitable for broadband applications in flyaway and satellite IP networks for both voice and data communication of different modulation mode,

Excellent output linearity and phase noise with full monitor and control (M&C) features. Auto input voltage ranging between 16Vdc to 60Vdc. Designed to operate between -40°C to +60°C under harsh outdoor environment.

Easy installation with redundancy ready features to work in 1+1 redundancy mode.

Features

- Feed mountable
- Monitoring and Control through Serial and Ethernet ports
- Excellent output power linearity and phase noise
- Fault identification and alarm generation
- Auto gain control throughout operating temperature
- Auto input DC ranging 16 to 60Vdc
- Wide operating temperature -40°C to +60°C
- Fanless 8W option available with operating temperature up to +55°C
- IP65 Weatherproof
- RoHS Compliant

Quality Assurance

100% thorough stringent quality checks in addition to well-defined Environmental Stress Screening to ensure operation in harsh outdoor environment conditions. All subjected to seal test for water ingress verification.

Reliability

Field proven under harsh environment conditions. Agilis ODUs can withstand temperature ranging from -40°C to +60°C under 100% humidity.

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Technical Specifications

RF Specifications

Freq Band	Transmit	IF	LO
Standard	14.00 – 14.50GHz	950 – 1450MHz	13.05GHz
Extended	13.75 – 14.50GHz	950 – 1700MHz	12.80GHz

Output Power	P _{1dB}	P _{linear}
8W	39.0dBm (8W)	36.0dBm (4W)

Small Signal Gain	64dB min
Gain Flatness	±2dB within band ±1dB over 40MHz
Gain Variation	±2dB within band over operating temperature
Intermodulation	-25dBc max @ P _{linear}
Spurious	According to EN 301 428
Phase Noise	-93dBc/Hz max @100KHz offset -83dBc/Hz max @10KHz offset -73dBc/Hz max @1KHz offset
VSWR	2.0:1 max @input 2.0:1 max @output with optional external isolator
Noise Power Density	Tx Band: -70dBW/4KHz max Rx Band: -142dBW/4KHz max

AC/DC Power

Prime Power	16 to 60Vdc
Power Consumption	80VA

Interface

IF Input	N-Type Female 50Ω F-Type Female 75Ω (option)
RF Output	WR75 Square Grooved

External Reference Requirement

Frequency	10MHz
Power Level	-5dBm to +5dBm
Phase Noise	-155dBc/Hz max @100KHz offset -145dBc/Hz max @10KHz offset -135dBc/Hz max @1KHz offset

Monitor & Control

Monitor	BUC Temperature Status Alarm with LED Indicator LO Unlock Alarm RF Input and Forward Power Detection
Control	Gain adjustable 15dB with 0.5dB step RF Output On/Mute
Communication Port	Serial RS232/RS485 Ethernet (SNMP & HTTP)
Transmit Redundancy	Redundancy-Ready (with external controller unit)

Environmental

Operating Temperature	-40°C to +60°C
Relative Humidity	Up to 100%
Weatherproof	IP65

Mechanical

Dimension (excluding interface connectors)	L282 x W142 x H98mm L11.10" x W5.59" x H3.86"
Weight	4.1Kg / 9.0lbs

Compliance Standard

IEC 609501-2nd Edition	International Safety Standard for Information Technology Equipment
ETSI EN 301 489-12	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) Standard for radio equipment and services; Part 12: Specific conditions for Very Small Aperture Terminal, Satellite Interactive Earth Stations operated in the frequency ranges between 4GHz and 30GHz in the Fixed Satellite Service (FSS)
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility Standard for Radio Equipment and Services
ETSI EN 301 428	Satellite Earth Stations and Systems (SES); Harmonized EN for Very Small Aperture Terminal (VSAT); Transmit-only, transmit/receive or receive-only satellite earth stations operating in the 11/12/14 GHz frequency bands covering essential requirements under article 3.2 of the R&TTE directive
FCC Part 15 Class B	Two levels of radiation and conducted emissions limits for unintentional radiators (FCC Mark)

NOTE: All specifications subject to change without notice
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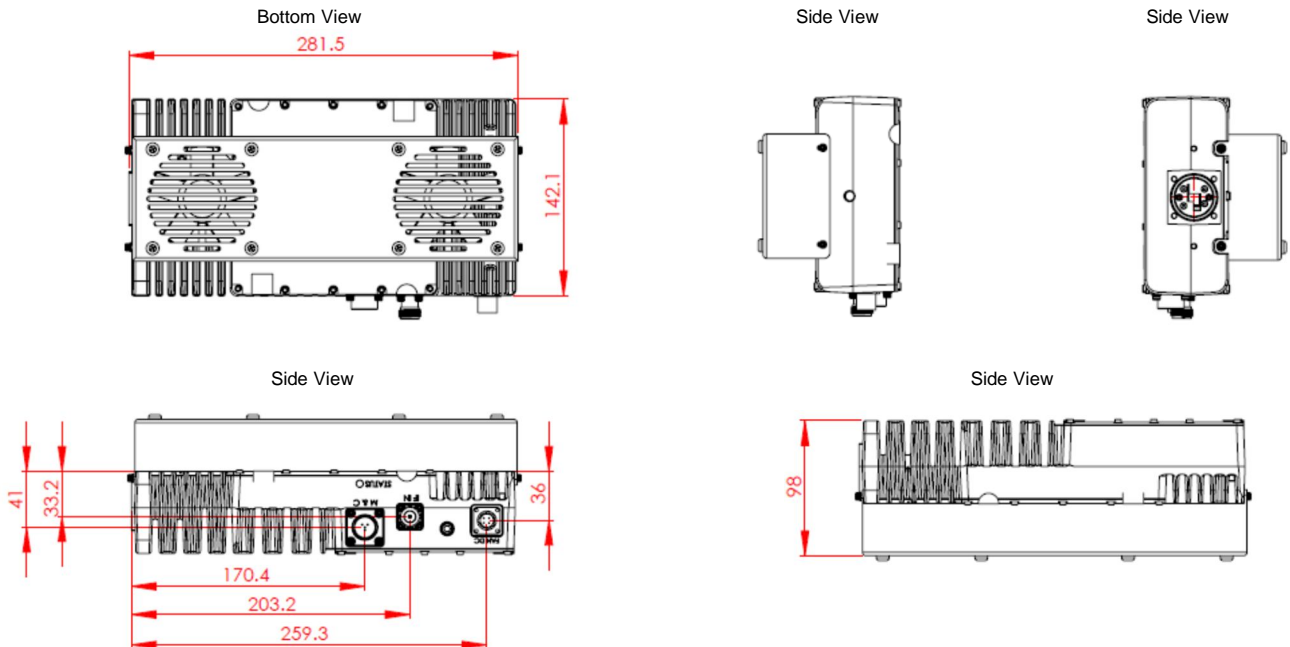
Standard Part List for Standalone Configuration

ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	BUC		ALB128xxx8	01	BUC
2	Cable M&C	RS485/ETH	2502041169	01	C/A M&C 485/ETH 12-8P to DB9 (F) 2M
3	Cable M&C	ETH	2502041166	01	Cable Assembly ETH-DB9 to RJ45 2M
4	Cable M&C	RS485	6103480008	01	Converter USB to RS485
5	Mounting Accessory Set			01	Mounting screws including brackets and gasket for flange WR75

Option Items

ITEM	PRODUCT NAME	OPTION	PART NUMBER	DESCRIPTION
1	WG Flexible	0.6M	4203490010	Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 0.6M
		1.0M	4203490049	Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 1.0M
		1.5M	4203490014	Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 1.5M
2	RF Cable	3M	2502040137	C/A RF N (M) to N (M) 3M
		7M	2502040109	C/A RF N(M) TO N(M) 7M
		10M	2502041952	C/A RF N(M) TO N(M) 10M
3	Cable M&C	6M	2502041980	C/A M&C 485/ETH 12-8P to DB9 (F) 6M
		50M	2502041722	C/A M&C 485/ETH 12-8P to DB9 (F) 50M

Mounting Diagram

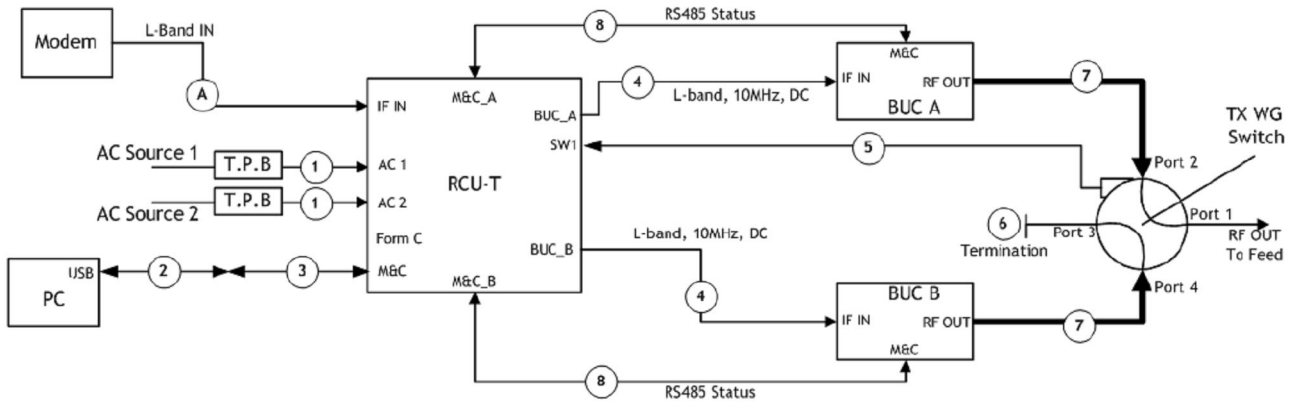


NOTE: Part list and drawing subject to change without notice
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1:1 Redundancy System Block Diagram



Standard Part List for 1:1 Configuration

ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	Prime Power Input Cable	AC	1001520980	02	Transient Protection Box 12-3S to Underterminated 220Vac 5A 3M
2	Converter	RS485	6103480008	01	Converter USB to RS485
3	Cable M&C	Serial/ETH	2502041169	01	C/A M&C Serial/ETH 12-8P to DB9 (F) 2M
4	Cable RF	3M	2502040137	02	C/A RF N (M) to N (M) 3M
5	Cable Control	3M	2502040155	01	C/A Switch RCU Control 10-6S to 10-6P 3M
6	WG Termination		4203490015	01	Termination WR75 75W CPRF
7	WG Flexible	1.0M	4203490049	02	Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 1.0M
8	Cable Control	2M	2502040561	02	C/A Straight 12-8S to 12-8P 2M
9	WG Switch		5903290009	01	WG Switch Ku Band WR75 Single 230Vac
10	RCU		AAV6103204-T	01	Redundancy Control Unit
11	BUC		ALB128xxx8	02	Ku BUC 8W
12	Cable M&C	ETH	2502041166	01	C/A M&C ETH-DB9 (M) to RJ45 2M
13	BUC Mounting Accessory Set			02	Mounting screws including brackets, studs, and gasket for flange WR75
14	RCU Mounting Accessory Set			01	RCU Mounting brackets including screws and studs

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