



# ALB128 Series

Klassic 6W/8W Ku Band  
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 Electrical 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 ODU's 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
Plan	12.75 – 13.25GHz	950 – 1450MHz	11.80GHz
Standard	14.00 – 14.50GHz	950 – 1450MHz	13.05GHz
Extended	13.75 – 14.50GHz	950 – 1700MHz	12.80GHz

Output Power	P <sub>1dB</sub>	P <sub>linear</sub>
6W	37.8dBm (6W)	34.8dBm (3W)
8W	39.0dBm (8W)	36.0dBm (4W)

<b>Small Signal Gain</b>	62dB min (6W) 64dB min (8W)
<b>Gain Flatness</b>	±2dB within band ±1dB over 40MHz
<b>Gain Variation</b>	±2dB within band over operating temperature
<b>Intermodulation</b>	-25dBc max @ P <sub>linear</sub>
<b>Spurious</b>	According to EN 301 428
<b>Phase Noise</b>	-93dBc/Hz max @100KHz offset -83dBc/Hz max @10KHz offset -73dBc/Hz max @1KHz offset
<b>VSWR</b>	2.0:1 max @input 2.0:1 max @output with optional external isolator
<b>Noise Power Density</b>	Tx Band : -70dBW/4KHz max Rx Band : -142dBW/4KHz max

### AC/DC Power

<b>Prime Power</b>	16 to 60Vdc Auto Range
<b>Power Consumption</b>	60VA @6W 80VA @8W

### Interface

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

### Reference Requirement

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

### Monitor & Control

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

### Environmental

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

### Mechanical

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

### Compliance Standard

<b>IEC 609501-2nd Edition</b>	International Safety Standard for Information Technology Equipment
<b>ETSI EN 301 489-12</b>	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)
<b>ETSI EN 301 489-1</b>	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility Standard for Radio Equipment and Services
<b>FCC Part 15 Class B</b>	Two levels of radiation and conducted emissions limits for unintentional radiators (FCC Mark)

NOTE: All specifications subject to change without notice  
200420

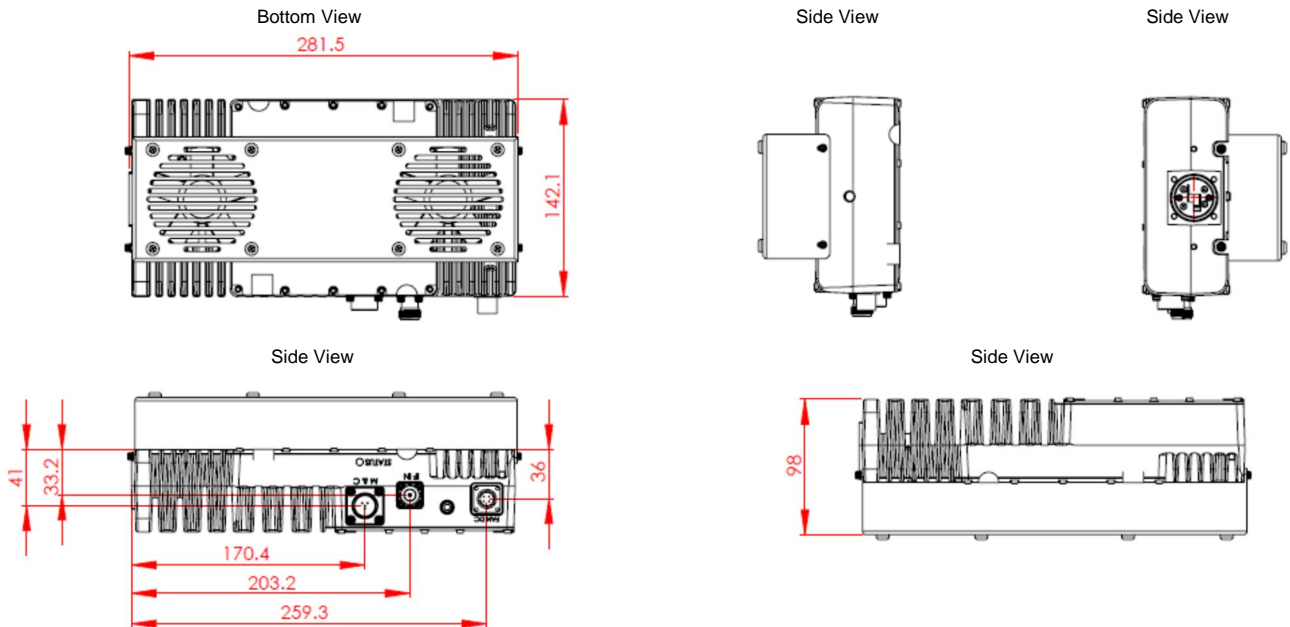
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### Standard Part List for Standalone Configuration

ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	BUC			01	BUC
2	Prime Power Input Cable	Non-IFL model		01	Cable Assembly 7-3P to Unterminated 3m
3	Cable M&C	RS232	2502040500	01	Cable Assembly M&C - 232/485 12-8P to DB9 (F) 3m
	Cable M&C	RS485	2502041169	01	Cable Assembly 12-8P to DB9 (F) 2M
4	Cable M&C	ETH	2502041166	01	Cable Assembly ETH-DB9 to RJ45 2M
5	Converter	RS485	6103480008	01	Converter USB to RS485
6	Mounting Accessory Set			01	Mounting screws including brackets and gasket for flange WR75

### Mounting Diagram



### 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 1m
		1.5m	4203490014	Flexible WG Ku band WR75 Sq Grooved to WR75 Sq Cover 1.5m

NOTE: Part list and drawing subject to change without notice  
200420