

# **ALB130 Series**

Lite 40W Ku Band Block-Up Converter

Designed to mount directly to the feedhorn, ideal for SOTM, fixed and maritime applications with option of IFL powered directly through modem via MS connector.

Innovative and excellent efficiency thermal design makes this BUC one of the most power efficient, robust and reliable to operate in harsh outdoor environment.

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

#### **Features**

- Feed mountable
- Forward power detection
- Monitoring and Control through Serial and Ethernet ports
- Fault identification and alarm generation
- LED status and alarm indicator
- Auto gain control throughout operating temperature
- Auto input DC voltage ranging 38 to 60Vdc
- Wide operating temperature -40°C to +60°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 ingression 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
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>	Plinear	
40W	46.0dBm (40W)	43.0dBm (20W)	

Small Signal Gain74dB minGain Flatness±2dB within band

±1dB over 40MHz

Gain Variation ±2dB within band over operating temperature

Intermodulation -25dBc max @ Plinear

Spurious According to EN 301 428

Phase Noise -93dBc/Hz max @100KHz offset
-83dBc/Hz max @10KHz offset

-73dBc/Hz max @1KHz offset

VSWR 1.5:1 max @input

1.25:1 max @output with optional external

isolator

Noise Power Density Tx Band : -70dBW/4KHz max

Rx Band : -142dBW/4KHz max

#### AC/DC Power

Prime Power 38 to 60Vdc Auto Range

Power Consumption 280VA

#### Interface

IF Input N-Type Female 50Ω

F-Type Female 75 $\Omega$  (option)

RF Output WR75 Square Grooved

#### Reference Requirement

Frequency 10MHz

Power Level -5dBm to +5dBm

Ext Ref Phase Noise -155dBc/Hz max @100KHz offset

-145dBc/Hz max @10KHz offset -135dBc/Hz max @1KHz offset



#### Monitor & Control

Monitor BUC Temperature

Status Alarm LED Indicator

LO Unlock Alarm

RF Forward Power Detection

**Control** Gain adjustable 20dB 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

#### Mechanical

Dimension (excluding L192 x W120 x H100mm (Std/Ext)

interface connectors) L7.56" x W4.72" x H3.94"

L192 x W120 x H110mm (Plan) L7.56" x W4.72" x H4.33"

Weight 4.0Kg / 8.8lbs (Std/Ext)

4.2Kg / 9.26lbs (Plan)

NOTE: All specifications subject to change without notice 200420

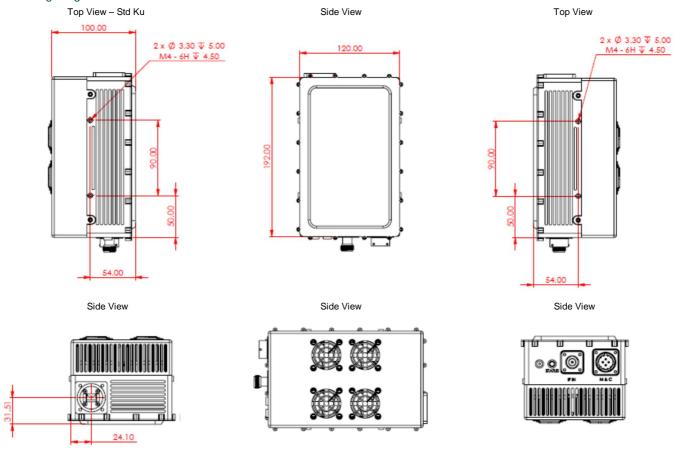
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### Standard Part List for Standalone Configuration

ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	BUC			01	BUC
2	Cable M&C	RS232 / RS485		01	Cable Assembly ETH/485 14-12S to DB9 (F) 2M
3	Cable M&C	ETH	2502041166	01	Cable Assembly ETH-DB9 to RJ45 2M
4	Converter	RS485	6103480008	01	Converter USB to RS485
5	Mounting Accessory Set			01	Mounting brackets and screws including 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

