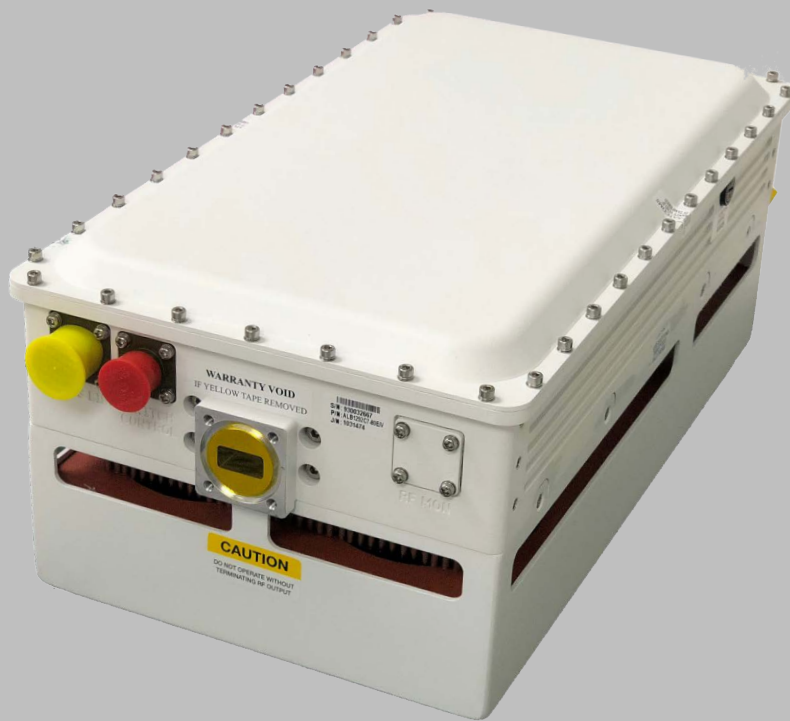




ALB129 Series

Compact 80W
Ku Band Block Up Converter

This small and lightweight BUC is ideal for mobile and satellite uplink applications.

The BUC has “Best in Class” efficiency and “lowest power consumption.” The unit works on a wide range AC power supply of 96VAC to 264VAC. Innovative and efficient thermal design makes this BUC one of the smallest, robust, reliable and rugged enough to withstand outdoor conditions in the industry.

Built-in redundancy feature eliminates the use of an external controller for 1:1 redundancy operation. This eliminates messy cabling at the antenna making this a very elegant solution.

Extensive M/C interface with RS232/RS485/Ethernet (SNMP & HTTP).

Features

- Compact and lightweight
- Available in standard and extended Ku-Band
- Forward power detection
- Intuitive monitoring & control through RS232/RS485 & Ethernet (SNMP & HTTP),
- Automatic fault identification & alarm generation
- Temperature compensation facility
- Built-in redundancy facility
- Built-in 10MHz reference with auto-detection
- Wide operating temperature range -40°C to +60°C
- RoHS Compliant
- Waterproof

Quality Assurance

100% of all BUCs go through stringent quality checks in addition to well defined Electrical Stress Screening to ensure operation in harsh outdoor environments. The BUCs are also 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 with up to 100% humidity.

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Technical Specifications

RF Specifications

Transmit Frequency	14.00GHz – 14.5GHz (Std Ku) 13.75GHz – 14.5GHz (Ext Ku)
IF Frequency Range	950MHz – 1450MHz (Std Ku) 950MHz – 1700MHz (Ext Ku)
LO Frequency	13.05GHz (Std Ku) 12.80GHz (Ext Ku)
Output Power	49dBm (P1dB)
Spectral Re-growth	-30dBc @ Single carrier 3dB back-off from P1dB at 1.0 x symbol rate offset for QPSK or
Third Order Intermod (two tone)	QPSK -25dBc @ two carrier 2MHz apart at 3dB back-off from P1dB
Small Signal Gain	75dB Min
Gain Flatness Full Band	±2dB
Gain Slope over 40MHz	±1dB
Gain Variation over temperature	±2dB @ from -40°C to +60°C
Gain Control	20dB in step of 0.5dB
O/P spurious	According to EN301428
Phase Noise @ Offset	
1KHz	-73dBc/Hz
10KHz	-83dBc/Hz
100KHz	-93dBc/Hz
I/P VSWR	1.5:1
O/P VSWR	1.25:1 with external Isolator
Noise Power Density Tx BD	-70dBW/4KHz
Rx BD	-142dBW/4KHz

Power Requirement

Prime Power	230VAC (range 96V to 264VAC)
Power Consumption	550VA Typical at P1dB

Interfaces

IF Input Interface	50Ohms N-type Female
Output Interface	WR 75G

External Reference

Frequency	10MHz
Power	-5dBm to +5dBm
Internal reference	Built-in
External reference phase noise	
Requirement @ frequency offset	
1KHz	-150dBc/Hz
10KHz	-155dBc/Hz
100KHz	-160dBc/Hz

Monitor And Control

Monitor	BUC temperature Status alarm Output power LED status indication
Control	Attenuation RF output mute
Interface	RS232/RS485 & Ethernet (SNMP & HTTP) / WIFI (Optional)
Tx Redundancy	Built-in

Environmental

Operating Temperature	-40°C to +60°C
Humidity	Up to 100% Weather protection sealed to IP65

Mechanical

Size	370L x 200W x 150H mm
Weight	9.5kg
Color	White Powder Coat

Note: All specifications are subject to change without notice.
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