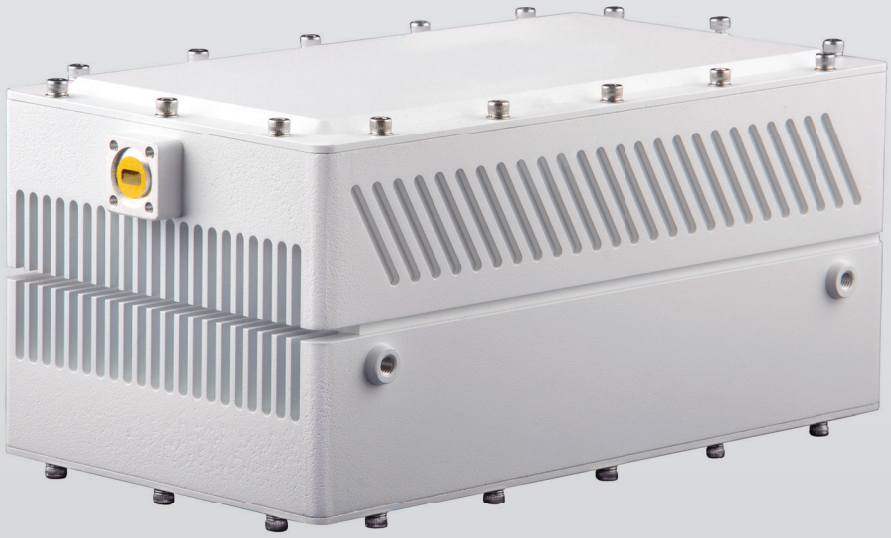

ALB110 Series

Compact 12W
Ka-Band Block-Up Converter

This small and light weight new Ka-Band BUC is ideal for mobile and satellite uplink applications. Designed to be mounted on the feed horn, the BUC has excellent efficiency. The unit works on a wide range input DC power supply from 38V to 60V. Innovative and efficient thermal design makes this BUC one of the smallest, lightest and most reliable in the industry.

With redundancy-ready feature, the unit can be easily configured to work in 1:1 redundant mode.

Features

- Compact and lightweight
- Excellent linearity
- Extremely reliable
- High power efficiency
- Excellent phase noise characteristics
- Low spurious
- Forward power detection function
- Remote monitor & control through RS232/RS485 and Ethernet (SNMP & HTTP)
- Wide input DC voltage range
- Automatic fault identification & alarm generation
- Automatic temperature compensation feature
- Redundancy option
- Wide operating temperature range -40ºC to +60ºC
- RoHS compliant
- Waterproof
- LED indicator for BUC status

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 -40ºC to +60ºC with up to 100% humidity.

Agilis

ALB110 Series

Compact 12W
Ka-Band Block-Up Converter

Technical Specifications

RF Specifications

Transmit Frequency	28.0GHz to 30.0GHz 29.0GHz to 31.0GHz
IF Frequency Range	950MHz to 1950MHz
Output Power @ MOP	40.8dBm
Small Signal Gain	70dB (min)
Gain Flatness	±2.0dB typ
Gain Flatness over 40MHz	±1.0dB typ
Gain Variation	±2dB over the operating temperature range
Phase Noise @ Offset	
1KHz	-75dBc/Hz typ
10KHz	-85dBc/Hz typ
100KHz	-95dBc/Hz typ
Spurious	-60dBc typ
I/P VSWR	1.5:1 max
O/P VSWR	2.0:1 max

DC Power

Prime Power	48VDC (range 38 to 60VDC) Optional AC supply
Power Consumption	300W @ 48VDC input

Interfaces

IF Input Interface	50Ohms N-type Female / 75Ohms F-type Female (optional)
Output Interface	WR28 grooved

External Reference

Frequency	10 MHz (50MHz optional)
Power	-5dBm to +5dBm
External reference phase noise requirement @ frequency offset	
1KHz	-150dBc/Hz
10KHz	-155dBc/Hz
100KHz	-160dBc/Hz

Monitor & Control

Monitor	BUC temperature LO unlocked alarm Status alarm RF Output Power detection LED indication
Control	Adjustable gain with 0.5dB step size RF output mute
Interface	RS232/RS485, Ethernet (SNMP & HTTP)
Tx Redundancy	Redundancy-ready (with external RCU)

Environmental

Operating Voltage	-40ºC to +60ºC
Power Supply Interface	Up to 100% Weather protection sealed to IP65

Mechanical

Size	203L x 135W x 125H mm
Weight	4kg
Color	White Powder Coat

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); ElectroMagnetic 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 4 GHz and 30 GHz in the fixed Satellite Service (FSS)
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility Standard for Radio Equipment and Services
FCC Part 15 Class B	Two levels of radiation and conducted emissions Limits for unintentional radiators (FCC Mark)

Note: All specifications are subject to change without notice.
Rev. 150814

www.agilissatcom.com

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