



# ALB150 Series

700W  
X-Band Block-up Converter

Agilis ALB150 Series X-Band BUC is a highly cost effective outdoor RF transmitter for satellite communication.

The BUC has excellent efficiency and consumes less power due to the innovative and efficient thermal design.

Built-in redundancy-ready 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 RS232/485 and Ethernet (SNMP & HTTP).

## Features

- Forward & reverse power detection facility
- Input power detection facility
- Intuitive monitoring & control through RS232/485 and Ethernet (SNMP & HTTP).
- Automatic fault identification & alarm generation
- Temperature compensation facility
- Built-in redundancy facility
- Built-in 10MHz reference
- Sample port for output monitoring
- 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.

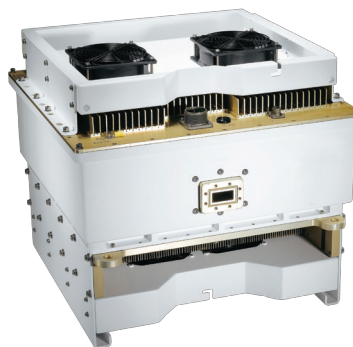
## Reliability

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

<b>Transmit Frequency</b>	7900MHz to 8400MHz
<b>IF Frequency Range</b>	950MHz to 1450MHz
<b>Output Power @ P1dB</b>	58.4dBm
<b>Small Signal Gain</b>	80dB nominal
<b>Gain Flatness</b>	±2.0dB over the O/P frequency band
<b>Gain Variation</b>	±2.0dB over the operating temperature range
<b>Gain Control</b>	20dB in step of 0.5dB
<b>Inter Modulation</b>	-25dBc @ Relative to combine power of two carriers at 3dB total power backoff from Rated Output power (P1dB)
<b>O/P spurious</b>	According to EN301443
<b>Phase Noise @ Offset</b>	
1KHz	-73dBc/Hz
10KHz	-83dBc/Hz
100KHz	-93dBc/Hz
<b>I/P VSWR</b>	1.5:1
<b>O/P VSWR</b>	1.5:1

### DC Power Requirement

<b>Prime Power</b>	For AC (230VAC, 50 – 60Hz)
<b>Power Consumption</b>	5.0kVA

### Interfaces

<b>IF Input Interface</b>	50Ohms N-type Female
<b>Output Interface</b>	WR 112G

### External Reference Requirement

<b>Frequency</b>	10MHz
<b>Power</b>	-5dBm to +5dBm
<b>Internal 10MHz Ref</b>	In-built (auto-detection )

<b>External reference phase noise requirement @frequency offset</b>	
1kHz	-150dBc/Hz
10kHz	-155dBc/Hz
100kHz	-160dBc/Hz

### Monitor & Control

<b>Monitor</b>	BUC Temperature Status Alarm RF Output Power/RF Input Power RF Reflected Output Power LED Status Indication
<b>Control</b>	Attenuation RF output mute
<b>Interface</b>	RS232/485, Ethernet (SNMP & HTTP)
<b>Tx Redundancy</b>	In-built

### Environmental

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

### Mechanical

<b>Size</b>	475L x 464W x 420H
<b>Weight</b>	55kg
<b>Color</b>	White Powder Coat

### 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); 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)
<b>ETSI EN 301 489-1</b>	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility Standard for Radio Equipment and Services
<b>FCC Class A</b>	Two levels of radiation and conducted emissions Limits for unintentional radiators (FCC Mark)

Note: All specifications are subject to change without notice.  
Rev. 170114

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