



## ALB150 Series

Palm Size 4W  
X-Band Block-Up Converter

Agilis ALB150 Series Feed Mount 4W X-BUC is small and lightweight BUC suitable for mobile applications and satellite uplink applications. The BUC has excellent thermal efficiency and consumes less power.

Innovative and efficient thermal design makes this BUC the smallest in the world.

### Features

- Low cost and compact package
- Direct antenna mounting
- Excellent linearity
- Extremely reliable
- High power efficiency
- Excellent phase noise characteristics
- Low spurious
- Automatic temperature compensation feature
- Wide operating temperature range -40°C to +60°C
- RoHS Compliant
- Waterproof with IP65 standard

### 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	7900MHz to 8400MHz
IF Frequency Range	950MHz to 1450MHz
Output Power @ P1dB	36.0dBm
Small Signal Gain	56dB min
Gain Flatness	±2dB over the O/P frequency band
Gain Variation	±2dB over the operating temperature range
Inter Modulation	-27dBc @ Relative to combine power of two carriers at 3dB total power backoff from P1dB
O/P spurious	According to EN301428
Phase Noise @ Offset	
1KHz	-73dBc/Hz max
10KHz	-83dBc/Hz max
100KHz	-93dBc/Hz max
I/P VSWR	2.0:1 max
O/P VSWR	2.0:1 max

### DC Power Requirement

Prime Power	24VDC Nominal (Range 18V to 36V)
Power Consumption	48W @ 24VDC input
Power Supply Interface	Common input via IFL

### Interfaces

IF Input Interface	50Ohms N-type Female / 75Ohms F-type Female (optional)
Output Interface	WR 112G

### External Reference Requirement

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

### Environmental

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

### Mechanical

Size	153L x 103W x 65H mm
Weight	1.5kg
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 4GHz and 30GHz in the Fixed Satellite Service (FSS)
ETSI EN 301 489-1	Electromagnetic Compatibility and RadioSpectrum Matters (ERM); ElectroMagnetic Compatibility Standard for Radio Equipment and Services
FCC Class A	Two levels of radiation and conducted emissions Limits for unintentional radiators (FCC Mark)

Note: All specifications are subject to changes without notice.  
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