

ALB150 Series

Palm Size Ì W X-Band Block-Up Converter

Agilis ALB150 Series Feed Mount Ì W 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.



ALB150 Series

Palm Size 8W X-Band Block-Up Converter

Technical Specifications

RF Specifications

Transmit Frequency IF Frequency Range Output Power @ P1dB 7900MHz to 8400MHz 950MHz to 1450MHz

According to EN301428

39.0dBm

Small Signal Gain

56dB min

Gain Flatness Gain Variation ±2dB over the O/P frequency band ±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

Phase Noise @ Offset

 1KHz
 -73dBc/Hz max

 10KHz
 -83dBc/Hz max

 100KHz
 -93dBc/Hz max

I/P VSWR O/P VSWR

2.0:1 max 2.0:1 max

DC Power Requirement

Prime Power 24VDC Nominal (Range 18V to 6€V)

Power Consumption

85W@ 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 10KHz -150dBc/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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