

# **ALB229-RM Series**

Compact 300W Ku-Band Block-Up Converter

Agilis ALB229 Series Ku-Band BUC (Block-Up Converter) is a highly cost effective indoor RF transmitter for satellite communication. Easy to install, it is redundancy-ready and field-proven for any harsh operating environment.

The BUC is suitable for both data and voice communication operating in different modulation formats including BPSK, QPSK, QAM and FM.

Agilis Ku-Band BUC offers a wide range of distinctive advantages and enhanced features for satellite communications systems based in remote or challenging geographic regions.

#### **Features**

- Available for all Ku Freq
- · L-Band Interface
- Easy installation
- Temperature compensation
- Redundancy option
- RS232/RS485 & Ethernet (SNMP & HTTP)
- · Excellent phase noise characteristics
- · Low spurious
- Low power consumption
- Built-in isolator & receive reject filter
- RF monitor port

## **Quality Assurance**

100% of all BUCs go through stringent quality checks in addition to well defined Electrical Stress Screening to ensure operation in harsh environments. The BUCs are also subjected to seal test for water ingress verification.

## Reliability

Field proven under harsh environment conditions, Agilis IDUs can withstand temperature ranging from 0°C to +50°C with up to 95% humidity.



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## Compact 300W Ku-Band Block-Up Converter

## **Technical Specifications**

## **RF** Specifications

**Transmit Frequency** 14.0GHz - 14.5GHz

13.75GHz - 14.5GHz

IF Frequency Range 950MHz - 1450MHz

950MHz - 1700MHz

13 05GHz LO Frequency

12.80GHz

Output Power (Psat / P1dB) 54.8dBm / 53.5dBm

Third Order Intermod (two tone) -26dBc @ two signal 2MHz apart at 3dB

backoff total output power P1dB

**Small Signal Gain** 80dB typ Gain Flatness Full Band ±2dB Gain Slope over 40MHz ±1dB

Gain Variation over temperature ±1dB @ from 0°C to +50°C **Gain Control** 20dB in step of 0.5dB O/P spurious According to EN301428

Phase Noise @ Offset

1KHz -75dBc/Hz 10KHz -85dBc/Hz 100KHz -95dBc/Hz I/P VSWR 1.3:1 O/P VSWR Noise Power Density Tx BD 70dBW/4KHz

Rx BD

142dBW/4KHz

## **AC Power**

Prime Power 230VAC (range 96V to 264VAC)

**Power Consumption** 

## Interfaces

50Ohms N-type Female IF Input Interface

**Output Interface** WR 75G

## Internal Reference

10MHz Frequency -5dBm to +5dBm Power

## Monitor And Control

Monitor **BUC** temperature

> Status alarm Output power Reverse power Input power

LED status indication

Control Attenuation

RF output mute

RS232/RS485 & Ethernet (SNMP & HTTP) Interface

Tx Redundancy Built-in

Environmental

0°C to +50°C **Operating Temperature** 

Humidity Up to 95%

Mechanical

Size

300W 19" rack, 5RU height

Weight 300W

35kg

Color Grey

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 Radio

Spectrum 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)

Shock 10g, 1ms half sine pluse

Note: All specifications are subject to change without notice

Rev. 010115

