ALB129-RM H-Series

Compact 250W~300W
Ku-Band Block-Up Converter

Agilis ALB129-RM H-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.

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 0ºC to +50ºC with up to 95% humidity.

Features

- Single package unit up to 300W
- Available for all Ku frequency
- L-Band interface
- Easy installation
- Temperature compensation
- In-built redundancy control feature
- RS232/RS485 & Ethernet (SNMP & HTTP)
- Excellent phase noise characteristics
- Low spurious
- Low power consumption
- Built-in isolator & receive reject filter
- RF monitor port
- In-built 10 MHz ref with auto detection
- Built in forward and reverse power detection

Agilis

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Technical Specifications

RF Specifications

Transmit Frequency	14.0GHz – 14.5GHz 13.75GHz – 14.5GHz
IF Frequency Range	950MHz – 1450MHz 950MHz – 1700MHz
LO Frequency	13.05GHz 12.80GHz
Output Power (P_{1dB}) **(Psat)**	54.0dBm (250W) 54.8dBm (300W)
Third Order Intermod (two tone)	-26dBc @ two signal 2MHz apart at 3dB backoff total output power from P_{1dB} @ 51dBm for 250W
Small Signal Gain	80dB typ
Gain Flatness Full Band	±2dB
Gain Slope over 40MHz	±0.5dB
Gain Variation over temperature Gain Control	±1dB @ from 0ºC to +50ºC 20dB in step of 0.1dB
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	1.25:1
Noise Power Density Tx BD **Rx BD**	75dBW/4KHz 145dBW/4KHz

AC Power

Prime Power	230VAC (range 96V to 264VAC)
Power Consumption for 250W	1.8kW (Psat) 1.5kW (P1dB)

Interfaces

IF Input Interface	50Ohms N-type Female
Output Interface	WR 75G
M& C and Power supply interface	Mil-standard circular connector
Front Panel	7 inch LCD touch screen

Internal Reference

Frequency	10MHz
Power	-5dBm to +5dBm
External reference detection	Yes (Auto dectection)

Monitor And Control

Monitor	BUC temperature Status alarm Output power Reverse power Input power
Control	Attenuation RF output mute Redundancy control
Interface	RS232/RS485 & Ethernet (SNMP & HTTP)
Tx Redundancy	Built-in

Environmental

Operating Temperature	0ºC to +50ºC
Humidity	Up to 95%

Mechanical

Size	19” rack, 5RU height
Weight	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.
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Request A Quote

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