SLB321 Series

Compact 16W
Ku-Band Block-Up Converter

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Designed to be mounted on the feed horn, the BUC has excellent efficiency and consumes less than 150W. The unit works on a DC power supply of 38V to 60V. Innovative and efficient thermal design makes this BUC one of the smallest in the industry yet robust , reliable and rugged enough to withstand outdoor conditions. Advanced interface options are incorporated for ease of use including; RS232, RS485, Ethernet with embedded web page, SNMP.

The SLB321 is available with a range of options and backed by round-the-clock technical support.

Features

- Compact and lightweight
- Available in both Standard and Extended Ku-Band
- Feed mountable
- Forward power detection ability
- Intuitive monitoring and control through RS232/RS485 and Ethernet (SNMP and HTTP)
- Wide operating temperature range -40°C to +60°C
- Auto ranging 36V to 60V DC Power Supply
- Automatic fault identification and alarm generation
- IP65 rated housing
- RoHS compliant

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 to test for water ingress.

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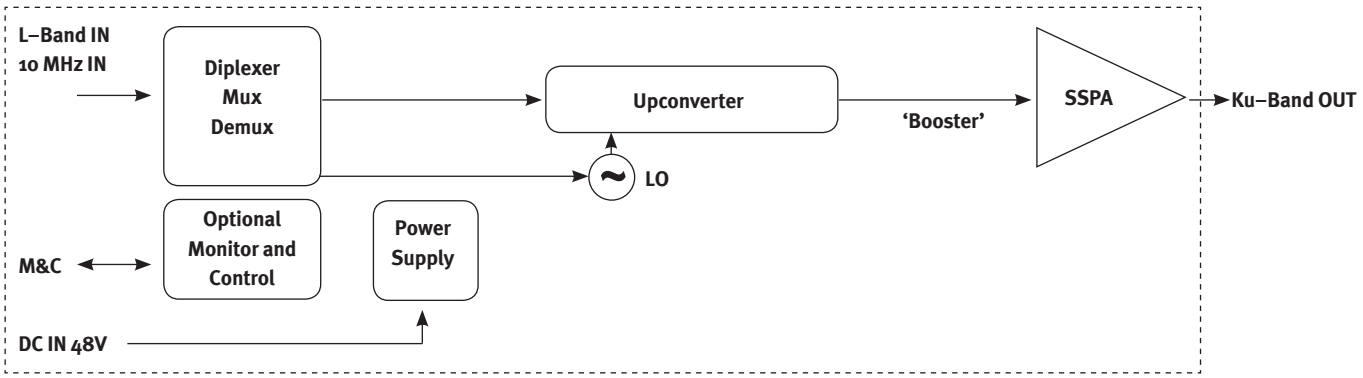
SLB321 SERIES 16W BUC
Technical Specification



FREQUENCY RANGE

Sub-Band	Input (MHz)	Output (GHz)	LO (GHz)
Standard	950 – 1450	14.00 – 14.50	13.05
Extended	950 – 1700	13.75 – 14.50	12.80

TRANSMIT

Output Power (P_{1dB})	42 dBm
Inter modulation	-25dBc with 2 equal carriers, 2MHz apart each at P_{1dB}-6dB
Small Signal Gain	70 dB min
Gain Flatness	±2.0 dB over the O/P frequency band
Gain Variation	±2.0 dB over the operating temperature range
Gain Control	20 dB in steps of 0.5 dB
Spurious	According to EN301486
Phase Noise @ Offset	
1kHz	-73 dBc/Hz
10kHz	-83 dBc/Hz
100kHz	-93 dBc/Hz
Input VSWR	1.3:1
Output VSWR	1.25:1(with external circulator)
Noise Power Density	
Tx Band	70 dBW/4kHz
Rx Band	142 dBW/4kHz

DC POWER

Prime Power	38 V – 60 V DC
Power Consumption	150W (Typical @ P_{1dB})

INTERFACES

IF Input Interface	N-type Female (50 ohm)
Output Interface	WR 75G

EXTERNAL REFERENCE

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

MONITOR & CONTROL

Interface	RS232/RS485 & Ethernet (SNMP & HTTP)
Monitor	BUC Temperature Status Alarm RF Output Power LED Status Indicator
Control	Attenuation RF Output Mute
1:1 Reduncancy	Optional external RCU

MECHANICAL

Dimensions	200L x 130W x 99.5H mm
Weight	3.5kg (7.7 lbs)
Colour	White Powder Coat

ENVIRONMENTAL

Operating Temperature	-40°C to +60°C (Optional -40°C to +70°C)
Humidity	Up to 100% Weather Protection to IP65

COMPLIANCE STANDARD

IEC 60950-1:2005+A1:2009	International Safety Standard for Information Technology Equipment
ESTI 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 4 GHz and 30 GHz in the fixed Satellite Service (FSS)
ESTI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility (EMC) Standard for Radio Equipment Services
FCC Part 15 Class B	Two levels of radiation and conducted emissions limits for unintentional radiators (FCC Mark)