SLB322 Series

Compact 40W
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 330W. 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 SLB322 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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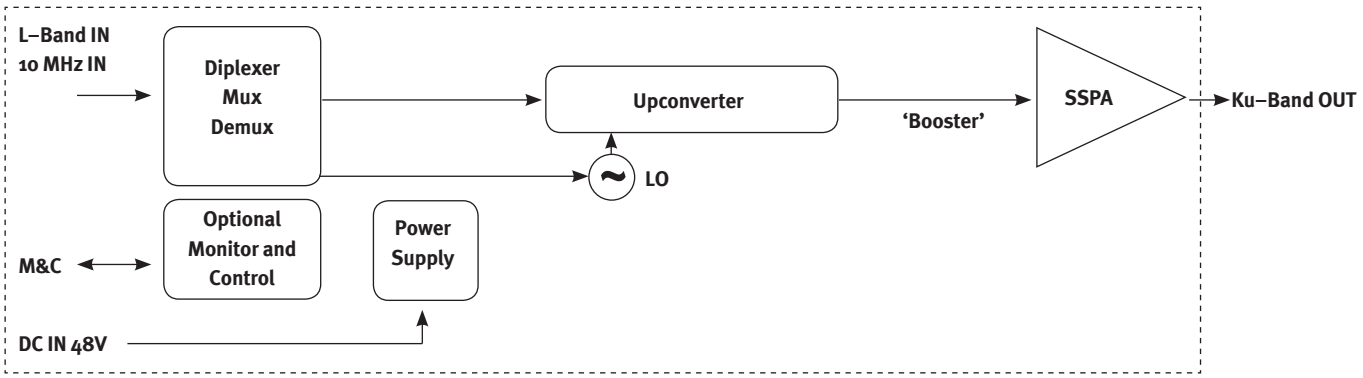
SLB322 SERIES 40W BUC
Technical Specification



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_{SAT})	46 dBm
Output Power (P_{LINEAR})	44 dBm
Spectral Regrowth	-30 dBc @ P_{LINEAR} at 1.0 x symbol rate for OQPSK or QPSK
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 to 60 V DC
Power Consumption	330W (Typical @ P_{SAT})

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 130H mm
Weight	3.7kg (8.14 lbs)
Colour	White Powder Coat

ENVIRONMENTAL

Operating Temperature	-40°C to +60°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)