

150W/200W C-Band Block-Up Converter

Agilis ALB 180-K Series C-Band BUC (Block-Up converter) is a highly cost effective outdoor 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 C-Band BUC is designed for the SCPC (Single Channel Per Carrier) network configurations and for the low or Intermediate data rate for MCPC (Multi-Channel Per Carrier), DAMA (Demand Assigned Multiple Access) or TDMA (Time Division Multiple Access) applications.

Agilis C-Band BUC offers a wide range of distinctive advantages and enhanced features for satellite communications systems based in remote or challenging geographic regions. The equipment employs L-Band interface to the indoor unit. Agilis ALB 180-K Series C-Band BUC is a low cost solution suitable for broadband application (such as DVB-RCS) in satellite IP networks.

Features

- Available for all C-Band frequencies
- L-Band Interface
- Low cost, compact
- Direct antenna mount
- Easy installation
- Temperature compensation
- High power options
- Redundancy option
- RS 232/485, FSK & SNMP M&C option
- Excellent phase noise characteristics
- · Low spurious
- · Low power consumption
- Wide input D.C. voltage range

Monitoring and Control (Optional)

- SSPA On/Off control
- Automatic level control with level stability accuracy better than ± 0.5 dB
- Adjustable gain
- · Temperature sensor reading
- LO unlocked alarm
- Input Power Detection
- Output Power Detection
- Ethernet (SNMP + HTTP)

Reliability

Field proven under harsh environment conditions. Agilis ODUs can withstand temperature ranging from -40°C to +60°C with up to 100% humidity.

Quality Assurance

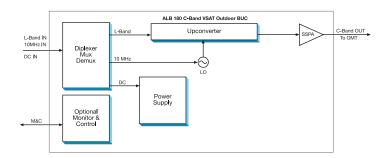
All Agilis ODUs go through intensive active electrical stress screening with performance being monitored during screening. In addition, all outdoor units undergo 100% waterproof test equivalent to IP65 to ensure normal operation during tropical, cold and harsh environment.



ALB 180 Series

150W/200W C-Band Block-Up Converter

Technical Specifications



Frequency Range (MHz)

Input	Output	LOW L O
950 to 1525	5850 to 6425	4900
1100 to 1400	6725 to 7025	5625
950 to 1750	5925 to 6725	4975
1400 to 1700	6425 to 6725	5025
950 to 1825	5850 to 6725	4900
	950 to 1525 1100 to 1400 950 to 1750 1400 to 1700	950 to 1525 5850 to 6425 1100 to 1400 6725 to 7025 950 to 1750 5925 to 6725 1400 to 1700 6425 to 6725

Transmit

Power	Output P1dB	Gain	Typ AC Power
	(dBm) min	(dB)	Consumption (VA)
150W**	52	81 – 85	1000VA
200W**	53	82 – 86	1200VA

Input Power @P1dB Output

Gain Flatness over Full

Bandwidth

Gain stability Over Temp Gain Control

Spurious @ P1dB Output

Phase Noise @ 100Hz offset

@ 1kHz offset @ 10kHz offset

@ 100kHz offset

Inter Modulation

Frequency Inversion Input VSWR

Input Interface

Output Interface

-25 dBm (Typ)

4 dB max

4 dB max

20 dB in step of 0.5 dB -55 dBc max

-63 dBc/Hz

-73 dBc/Hz

-83 dBc/Hz

-93 dBc/Hz

-25 dBc @ Relative to combine power of two carriers at 3dB

total power backoff from Rated Output power

Non inverting

2:0:1 tvp

50Ω N-Type Female / F- Type

Female (Optional) 50Ω N-Type Female (1mW)

WR137G (2W to 500W)

Environmental

Operating Temperature -40°C to + 60°C

Relative Humidity up to 100%

Weather Protection sealed to



External Reference

Frequency

Phase Noise External Reference Dependent

-5 to +5 dBm @ 50Ω Power

Monitor And Control (optional)

Interface SSPA Output Power RS 232/485, (Optional) : Ethernet (Http+SNMP)

Detect SSPA On/Off Control

Yes Yes

Power Supply

AC Input Voltage for Booster

220Vac or 110Vac (Factory preset)

DC Input Voltage for BUC 20W above

+48 Vdc (Optional)

Mechanical

Dimensions 610L x 320W x 253H mm

Weight 28 ka

Colour White powder coat

Compliance Standard

IEC 60950 International Safety Standard for Information

Technology Equipment

ETSI EN 300 673 Electromagnetic Compatibility and Radio

Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) Standard for Very Small

Aperture Terminal (VSAT)

ETSI EN 301 489-1 Electromagnetic Compatibility and Radio

Spectrum Matters (ERM); ElectroMagnetic Compatibility Standard for Radio Equipment

and Services

FCC Part 15 Class B Two levels of radiation and conducted

emissions Limits for unintentional radiators

(FCC Mark)

IEC 60068 Environmental Testing Standard MIL-STD-810F **Environmental Engineering**

Considerations and

Laboratory Tests

Note: All Specifications are subject to changes

without notice. Ver. 300112

