



ALB 280 Series

500W C-Band Block-Up Converter

Agilis ALB 280 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 280 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
- SNMP
- FSK

Reliability

Field proven under harsh environment conditions. Agilis ODUs can withstand temperature ranging from -40°C to $+60^{\circ}\text{C}$ with up to 100% humidity.

Quality Assurance

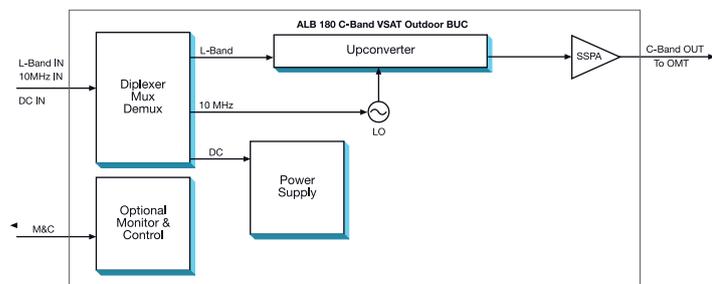
All Agilis ODUs go through intensive active electrical stress screening with performance being monitored during screening. In addition, all outdoor units undergo 100% waterproof test equivalent to IP65 to ensure normal operation during tropical, cold and harsh environment.

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Technical Specifications



Frequency Range (MHz)

	Input	Output	LOW L O
Intelsat	950 to 1525	5850 to 6425	4900
Insat	1100 to 1400	6725 to 7025	5625
Measat 3	950 to 1750	5925 to 6725	4975
ST-1/Palapa-C	1400 to 1700	6425 to 6725	5025
Full C	950 to 1825	5850 to 6725	4900

Transmit

Power	Output Psat (dBm) min	Gain (dB)	Typ AC Power Consumption (VA)
500W	57	83 – 87	3.0KVA

Input Power @Psat Output	-25 dBm (Typ)
Gain Flatness over Full Bandwidth	4 dB max
Gain stability Over Temp	4 dB max
Gain Control	20 dB in step of 0.5 dB
Spurious @ Psat Output	-55 dBc max
Phase Noise @ 100Hz offset	-63 dBc/Hz
@ 1kHz offset	-73 dBc/Hz
@ 10kHz offset	-83 dBc/Hz
@ 100kHz offset	-93 dBc/Hz
Inter Modulation	-25 dBc @ Relative to combine power of two carriers at 3dB total power backoff from Rated Output power
Frequency Inversion	Non inverting
Input VSWR	2:0:1 typ
Input Interface	50Ω N-Type Female / F- Type Female (Optional)
Output Interface	WR137G

Environmental

Operating Temperature	-40°C to + 60°C
Relative Humidity	up to 100% Weather Protection sealed to IP65

www.agilissatcom.com

For more information, please send enquiry to:

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USA

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Europe

europa_satcoms@stee.stengg.com

External Reference

Frequency	10 MHz
Phase Noise	External Reference Dependent
Power	-5 to +5 dBm @ 50Ω

Monitor And Control (optional)

Interface	RS 232/485, Ethernet (Http + SNMP)
SSPA Output Power Detect	Yes
SSPA On/Off Control	Yes

Mechanical

Dimensions	475L x 464W x 420H mm
Weight	55 kg
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 MIL-STD-810F	Environmental Testing Standard Environmental Engineering Considerations and Laboratory Tests

Note: All Specifications are subject to changes without notice. Ver. 130614

