



ALB 280 Series

500W/750W/1000W
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 ODU's can withstand temperature ranging from -40°C to $+60^{\circ}\text{C}$ with up to 100% humidity.

Quality Assurance

All Agilis ODU's 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.

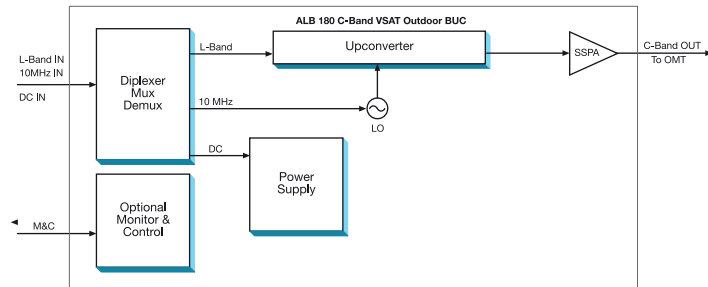


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Technical Specifications



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 P1dB (dBm) min	Gain (dB)	Typ AC Power Consumption (VA)
500W	57	83 – 87	3.0KVA
750W	58.8	83 – 87	4.5KVA
1000W	60	83 – 87	6.0KVA

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:

Singapore (Headquarters)

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USA

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Europe

europe_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, (Optional) : Ethernet (Http + SNMP)
SSPA Output Power Detect	Yes
SSPA On/Off Control	Yes

Mechanical

Dimensions	475L x 464W x 420H mm (500W) 800L x 464W x 420H mm (750W/1000W)
Weight	55 kg (500W) 90 kg (750W /1000W)
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

