

# **ALB 280 Series**

400W/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
- Monitor & Control through RS 232/485& Ethernet (HTTP &SNMP)
- Excellent phase noise characteristics
- · Low spurious
- Low power consumption

### **Monitoring and Control**

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

#### 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**

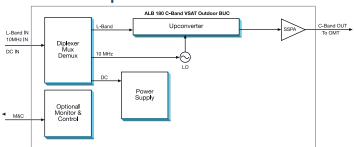
All Agilis ODUs go through intensive active electrical stress screening with performance being monitored during screening. In addition, all outdoor units undergo 100% waterproof test equivalent to IP65 to ensure normal operation during tropical, cold and harsh environment.



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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)
400W	56	83 – 87	2.7KVA
500W	57	83 – 87	3.0KVA

Input Power @Psat Output

Gain Flatness over Full

Bandwidth

**Gain stability Over Temp** 

**Gain Control** 

Spurious @ Psat Output Phase Noise @ 100Hz offset

@ 1kHz offset

@ 10kHz offset @ 100kHz offset

Inter Modulation

Input Interface

Non inverting Frequency Inversion Input VSWR 2:0:1 typ

 $50\Omega$  N-Type Female / F- Type

Female (Optional)

backoff from Psat-1

-25 dBm (Typ)

30 dB in step of 0.5 dB

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

4 dB max

4 dB max

-55 dBc max

-63 dBc/Hz

-73 dBc/Hz

-83 dBc/Hz

-93 dBc/Hz

**Output Interface** WR137G

#### 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

Power -5 to +5 dBm @ 50Ω

#### Monitor And Control (optional)

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

Detect

Yes SSPA On/Off Control Yes

#### Mechanical

Dimensions 475L x 464W x 420H mm

Weight 55 ka

Colour White powder coat

#### Compliance Standard

International Safety Standard for Information IEC 60950

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 Environmental Engineering** MIL-STD-810F

Considerations and

Laboratory Tests

Note: All Specifications are subject to changes

without notice. Ver. 010316

