



ALB180/280 Series

250W/300W/400W C Band
Block-Up Converter

Suitable for broadband application in satellite IP networks data and voice communication operating in different modulation BPSK, QPSK, QAM, FM. Designed for SCPC network configuration and low or intermediate data rate for MCPC (Multi-Channel Per Carrier), DAMA (Demand Assigned Multiple Access) or TDMA (Time Division Multiple Access).

Robust and reliable design to operate under harsh outdoor environment.

Simple and seamless 1+1 redundancy setup. Built-in redundancy-ready easily configured without need of external controller.

Features

- Forward, reflected and input power detection
- Output power monitoring port
- Monitoring and Control through Serial and Ethernet ports option
- Fault identification and alarm generation
- LED status and alarm indicator
- Auto gain control throughout operating temperature
- Built-in redundancy ready
- Built-in harmonics rejection filter
- Wide operating temperature -40°C to +60°C
- IP65 Weatherproof

Quality Assurance

100% thorough stringent quality checks in addition to well-defined Electrical Stress Screening to ensure operation in harsh outdoor environment conditions. All subjected to seal test for water ingress verification.

Reliability

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

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Technical Specifications

RF Specifications

Freq Band	Transmit	IF	LO
Intelsat	5850 – 6425MHz	950 – 1525MHz	4700MHz
Gorizont S	5725 – 6525MHz	950 – 1750MHz	4775MHz
Gorizont Ext	5725 – 6725MHz	950 – 1950MHz	4775MHz
Full C	5850 – 6725MHz	950 – 1825MHz	4900MHz

Output Power	PsAT	P1dB	Plinear
250W		54.0dBm (250W)	51.0dBm (125W)
300W		54.8dBm (300W)	51.8dBm (150W)
400W	56.0dBm (400W)		52.2dBm (166W)

Small Signal Gain	71dB min
Gain Flatness SSPA	±0.4dB over 40MHz
Gain Flatness BUC	±2dB within band
Gain Variation	±2dB within band over operating temperature
Intermodulation	-25dBc max @ Plinear
Spurious	According to EN 301 443
Phase Noise	-100dBc/Hz max @100KHz offset -90dBc/Hz max @10KHz offset -80dBc/Hz max @1KHz offset
VSWR	1.5:1 max @input 1.25:1 max @output
Noise Power Density	Tx Band : -70dBW/4KHz max Rx Band : -142dBW/4KHz max

AC/DC Power

Prime Power	180 to 260Vac @ 50/60Hz
Power Consumption	1500VA typ (250W) 1800VA typ (300W) 2000VA typ (400W)

Interface

IF Input	N-Type Female 50Ω
RF Output	WR137 Grooved

External Reference

Frequency	10MHz
Power Level	-5dBm to +5dBm
Phase Noise	-160dBc/Hz max @100KHz offset -155dBc/Hz max @10KHz offset -150dBc/Hz max @1KHz offset

Monitor & Control

Monitor	BUC Temperature Status Alarm with LED Indicator LO Unlock Alarm RF Input & Forward Power Detection Output Reflected Power Detection
Control	Gain adjustable 30dB with 0.5dB step (01.dB step - option) RF Output On/Mute
Communication Port	Serial RS232/RS485 Ethernet (SNMP & HTTP)
Transmit Redundancy	Built-In

Environmental

Operating Temperature	-40°C to +60°C
Relative Humidity	Up to 100%
Weatherproof	IP65

Mechanical

Dimension (excluding interface connectors)	L464 x W454 x H416mm L18.27" x W17.87" x H16.38"
Weight	55Kg / 121.3lbs

NOTE: All specifications subject to change without notice
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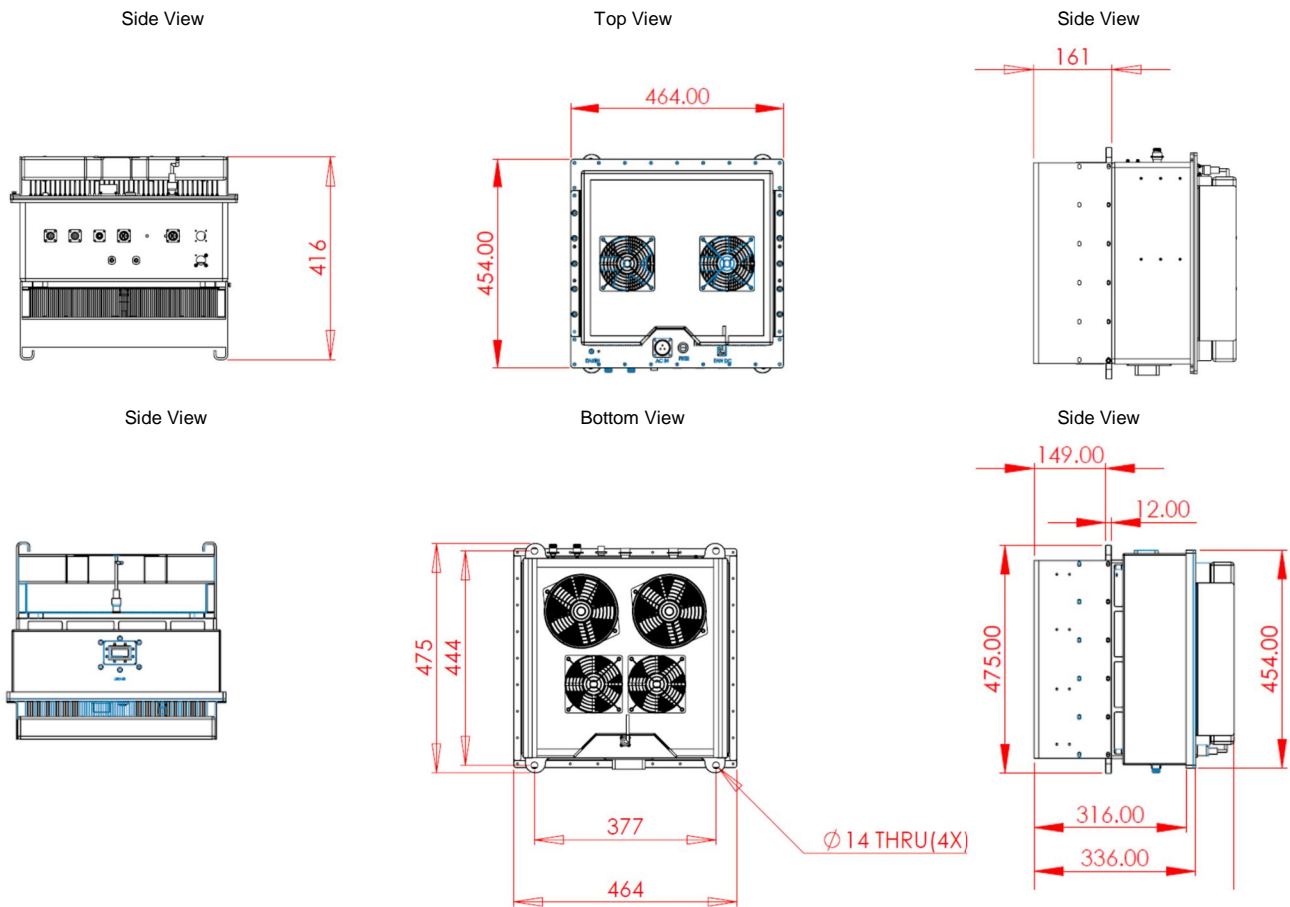
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Standard Part List for Standalone Configuration

ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	BUC			01	BUC
2	Prime Power Input Cable	AC		01	Transient Protection Box 16A 22-9S to Unterminated 3M
3	Cable M&C	RS485	2502041169	01	Cable Assembly ETH/485 12-8P to DB9 (F) 2M
4	Converter	RS485	6103480008	01	Converter USB to RS485
5	Mounting Accessory Set			01	Mounting brackets, studs, screws, gasket flange WR137

Mounting Diagram



Option Items

ITEM	PRODUCT NAME	OPTION	PART NUMBER	DESCRIPTION
1	WG Flexible	0.6M	4203490309	WG Flexible C Band WR137 CPRG to WR137 CPRF 0.6M
		1.0M	4203490057	WG Flexible C Band WR137 CPRG to WR137 CPRF 1.0M
		1.5M	4203490289G	WG Flexible C Band WR137 CPRG to WR137 CPRF 1.5M

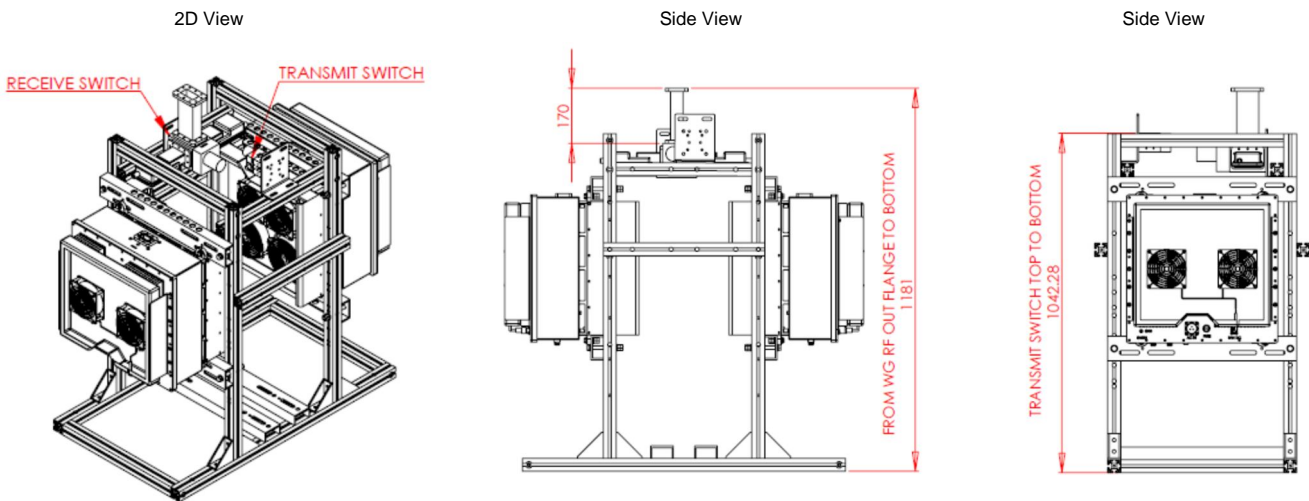
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Standard Part List for Redundancy 1+1 Configuration

ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	BUC			02	BUC
2	Prime Power Input Cable	110 / 220Vac		02	Transient Protection Box 16A 22-9S to Unterminated 3M
3	Cable M&C	RS485	2502041169	02	Cable Assembly ETH/485 12-8P to DB9 (F) 2M
4	Converter	RS485	6103480008	02	Converter USB to RS485
5	Mounting Accessory Set			02	Mounting brackets, studs, screws, gasket flange WR137
6	WG Flexible		4203490057	02	WG Flexible C Band WR137 CPRG to WR137 CPRF 1M
7	WG Switch			01	WG Switch C Band WR137 Dual 230Vac
8	WG H-Bend			01	WG H-Bend C Band WR137 CPRF to WR137 CPRF 80mm
9	WG Termination			01	WG Termination C Band WR137 CPRF 150W 120mm
10	Termination			01	Termination Coaxial N (M)
11	Cable Status Link		2502041099	01	Cable Assembly Status Link 12-8P to 12-8P 1.8M
12	Cable Switch Control		2502040155	01	Cable Assembly Switch RCU Control 10-6S to 10-6P 3M
13	Cable Switch Control		2502041006	01	Cable Assembly Switch Tx Control 10-6S to 10-6P 3M
14	Cable RF		6202040155	02	Cable Assembly RF N (M) to N (M) 1.5M

Mounting Diagram



Option Item

ITEM	PRODUCT NAME	OPTION	PART NUMBER	DESCRIPTION
01	Mounting Frame		4004430024	Mounting Frame w 2 Vertical Frames H1040 x W580mm, Base 1000 x 580mm

NOTE: Part list and drawing subject to change without notice
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