

ALB129 Series

Compact 4W/6W Ku Band
Block-Up Converter

Designed to mount directly to the feedhorn, suitable for mobile and satellite uplink applications.

Light in weight yet power efficient and high performance in power linearity. Robust and reliable to operate under harsh outdoor environment. Simple operation feature make this ideal for mobile flyaway and SOTM systems.

Features

- Feed mountable
- Low cost and compact package
- Auto gain control throughout operating temperature
- DC input 15 to 32Vdc
- Wide operating temperature -40°C to +60°C
- Fanless option available
- IP65 Weatherproof
- RoHS Compliant

Quality Assurance

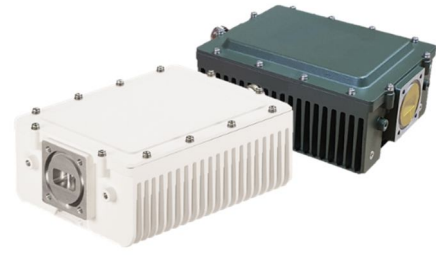
100% thorough stringent quality checks in addition to well-defined Electrical Stress Screening to ensure operation in harsh outdoor environment conditions. All subjected to seal test for water ingress verification.

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
Ext Ku	13.75 – 14.25GHz	950 – 1700MHz	12.80GHz
Output Power	P _{1dB}	P _{linear}	
4W	36dBm (4W)	33dBm (2W)	
6W	37.8dBm (6W)	34.8dBm (3W)	

Small Signal Gain	59dB min
Gain Flatness	±2dB within band
Gain Variation	±2dB within band over operating temperature
Intermodulation	-25dBc max @ P _{linear}
Spurious	According to EN 301 428
Phase Noise	-93dBc/Hz max @100KHz offset -83dBc/Hz max @10KHz offset -73dBc/Hz max @1KHz offset
VSWR	2.0:1 max @input 2.0:1 max @output

AC/DC Power

Prime Power	18 to 32Vdc auto range
Power Consumption	36VA max @4W 55VA max @6W

Interface

IF Input	N-Type Female 50Ω F-Type Female 75Ω (option)
RF Output	WR137 Grooved

Reference Requirement

Frequency	10MHz
Power Level	-5dBm to +5dBm
Phase Noise	-155dBc/Hz max @100KHz offset -145dBc/Hz max @10KHz offset -135dBc/Hz max @1KHz offset

Environmental

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

Mechanical

Dimension (excluding interface connectors)	L130 x W100 x H52mm (4W) L5.12" x W3.94" x H2.05" L130 x W100 x H60mm (6W) L5.12" x W3.94" x H2.36"
Weight	0.85Kg / 1.87lbs
Colour	White Powder Coated (standard)

Compliance Standard

IEC 609501-2nd Edition	International Safety Standard for Information Technology Equipment
ETSI EN 301 489-12	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) Standard for radio equipment and services; Part 12: Specific conditions for Very Small Aperture Terminal, Satellite Interactive Earth Stations operated in the frequency ranges between 4GHz and 30GHz in the Fixed Satellite Service (FSS)
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility Standard for Radio Equipment and Services
ETSI EN 301 428	Satellite Earth Stations and Systems (SES); Harmonized EN for Very Small Aperture Terminal (VSAT); Transmit-only, transmit/receive or receive-only satellite earth stations operating in the 11/12/14 GHz frequency bands covering essential requirements under article 3.2 of the R&TTE directive
FCC Class A	Two levels of radiation and conducted emissions limits for unintentional radiators (FCC Mark)

NOTE: All specifications subject to change without notice
200621

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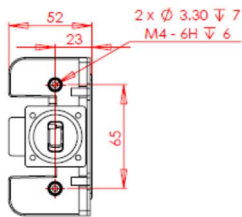
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Standard Part List for Standalone Configuration

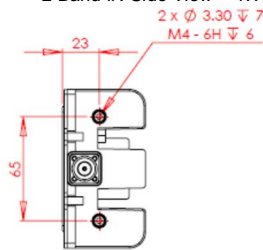
ITEM	PRODUCT NAME	OPTION	PART NUMBER	QTY	DESCRIPTION
1	BUC			01	BUC
2	Mounting Accessory Set			01	Mounting screws including gasket for flange WR75

Mounting Diagram

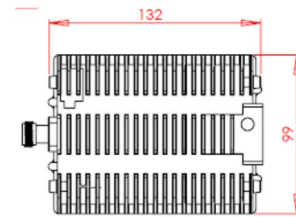
RF Out Side View – 4W



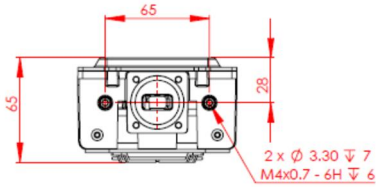
L-Band IN Side View – 4W



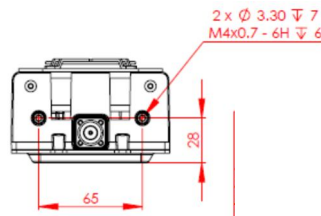
Bottom View – 4W



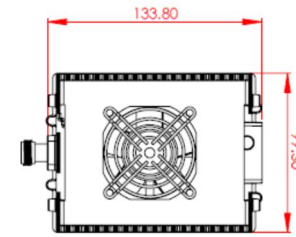
RF Out Side View – 6W



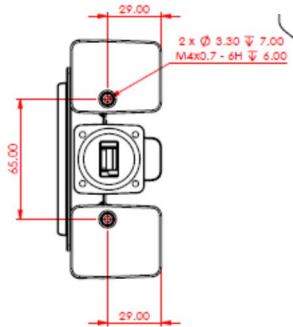
L-band IN Side View – 6W



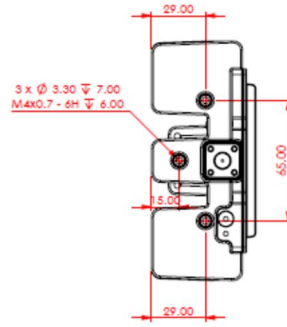
Bottom View – 6W



RF Out Side View – 6W Fanless



L-band IN Side View – 6W Fanless



Bottom View – 6W Fanless

