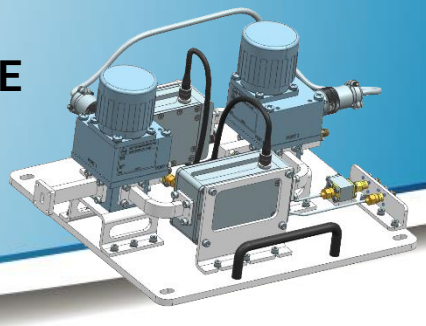
Ka-BAND REDUNDANCY PLATE

ACRS-Ka-ODU-11-V1

1:1 LNA redundancy system

Outdoor applications



Rev.01
Ed.03
24/02/20

The **ACRS-Ka-ODU-11-V1 family** of LNA plates is designed for the most challenging Ka-band **professional & military** satellite communication systems. It provides continuous operation without disruption of single receiving signal. Latest technology is applied to obtain the best noise figure, gain stability and return losses according to **MIL-STD-188-164C**. The ACRS-Ka-ODU-11-V1 family is a **high reliability** solution designed for **harsh environmental conditions**, with every single production unit **fully tested** in an environmental chamber and delivered with a complete factory acceptance test report.

RECEIVER SPECIFICATIONS

RF frequency	17.7 to 22.2 GHz
Input Ka-Band VSWR (50 Ω)	< 1.5:1
Output Ka-band VSWR (50 Ω)	< 1.3:1
Max. input level without damage	0 dBm
Gain	50 dB min
Gain flatness	±1.25 dB over whole BW
	±0.5 dB over 500 MHz
	±0.2 dB over 40 MHz
Gain stability (24 hours)	±0.2 dB @ const. temp.
Gain variation over temperature	±1.5 dB
Noise figure @ 25 ºC	≤ ACLNA-Ka-Ex-V1$_{NF}$ + 0.2 dB
Noise temperature @ 25 ºC	≤ ACLNA-Ka-Ex-V1$_{NT}$ + 20 K
Output P1dB	> +18 dBm
Output IP3	> +28 dBm
Spurious	< -70 dBc @ P_{OUT} = 0 dBm
AM/PM conversion	< 0.1 °/dB @ P_{OUT} = -10 dBm
Group delay over any 40 MHz (without option LN3)	
Linear	0.02 ns/MHz
Parabolic	0.001 ns/MHz^2
Ripple	0.1 ns pp
Switching time	< 100 ms
Desensitivity threshold	> -30 dBm

POWER SUPPLY

DC input voltage	15 V_{DC} (from IDU controller)
Consumption	5 W steady state typ
	30 W peak typ

MECHANICAL SPECIFICATIONS

Size (LxWxH)	230 x 254 x 170 mm	9 x 10 x 6.7 in
Weight	4.0 kg	8.8 lbs
Finish	RAL 9003 (White)	

ENVIRONMENTAL SPECIFICATIONS

Storage temperature	-40 °C to +85 °C
Operating temperature	-40 °C to +60 °C
Relative humidity	up to 100%
Operating altitude	up to 4500 m

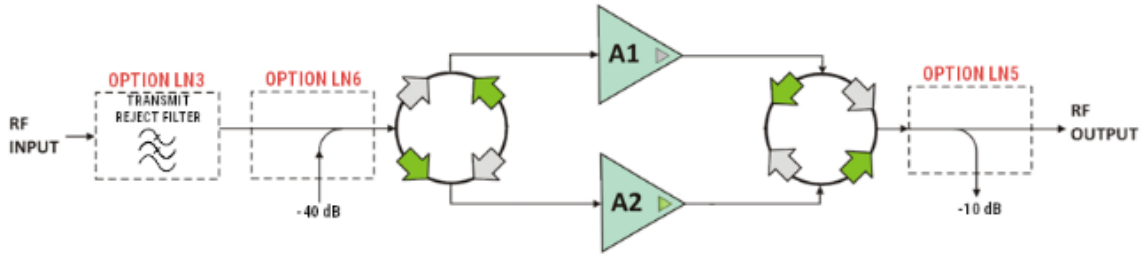
INTERFACES

All mating connectors provided

RX input (Ka-Band)	WR42 grooved (PBR 220)
RX output (Ka-Band)	Type SMA(F) 50 Ω
Standby output (Ka-band)	Type SMA(F) 50 Ω
Standby input (Ka-band)	Type SMA(F) 50 Ω
Output test coupler (Ka-band)	Type SMA(F) 50 Ω (option LN5)
Input test coupler (Ka-band)	Type SMA(F) 50 Ω (option LN6)
IDU controller	MS3112E16-26P

OPTIONS

LN3	Input transmit reject filter (NF + 0.3 dB)
LN5	Output test coupler 10 dB
LN6	Input test coupler 40 dB (NF + 0.1 dB)



Any other frequency band or custom specification available under request. Please, contact factory. Specifications are subject to change without notice.

c/ El Castro 22N, 39011, Santander, Spain Tel: +34 942 766 44 00 www.acorde.com sales@acorde.com