

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 (60 dB min option LN1)
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 .....	±2.5 dB (±1.5 dB option LN4)
Noise figure @ 25 °C .....	≤ ACLNA-Ka-EX-V1 <sub>NF</sub> + 0.2 dB
Noise temperature @ 25 °C .....	≤ ACLNA-Ka-EX-V1 <sub>NT</sub> + 20 K
Output P1 dB .....	> +8 dBm (+18 dBm option LN2)
Output IP3 .....	> +18 dBm (+28 dBm option LN2)
Spurious .....	< -70 dBc @ P <sub>OUT</sub> = 0 dBm
AM/PM conversion .....	> 0.1 dB/deg @ P <sub>OUT</sub> = -10 dBm
Group delay over any 40 MHz	
Linear .....	0.02 ns/MHz
Parabolic .....	0.001 ns/MHz <sup>2</sup>
Ripple .....	0.1 ns pp
Switching time .....	< 100 ms
Desensitivity threshold .....	> -30 dBm

### POWER SUPPLY

DC input voltage .....	15 V <sub>DC</sub>
Consumption .....	20W typ

### MECHANICAL SPECIFICATIONS

Size (LxWxH) .....	230 x 254 x 160 mm	9 x 10 x 6.3 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

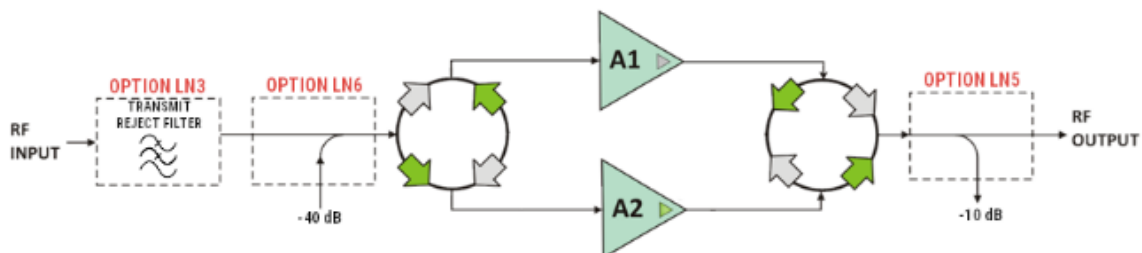
### INTERFACES

*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

LN1 .....	High gain configuration
LN2 .....	High linearity configuration
LN3 .....	Input transmit reject filter (NF + 0.3 dB)
LN4 .....	Increased gain stability
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.

