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 °C ........................ ≤ ACLNA-Ka-Ex-V1NF + 0.2 dB
- Noise temperature @ 25 °C ............... ≤ ACLNA-Ka-Ex-V1NT + 20 K
- Output P1dB ............................... > +18 dBm
- Output IP3 .................................... > +28 dBm
- Spurious .................................... < -70 dBc @ POUT = 0 dBm
- AM/PM conversion ........................... < 0.1 °/dB @ POUT = -10 dBm
- Group delay over any 40 MHz (without option LN3)
  Linear .................................... 0.02 ns/MHz
  Parabolic .................................. 0.001 ns/MHz²
  Ripple ..................................... 0.1 ns pp
  Switching time .............................. < 100 ms
- Desensitization threshold ................. > -30 dBm

**POWER SUPPLY**

- DC input voltage .......................... 15 VDC (from IDU controller)
- Consumption ............................... 5 W steady state typ
- 30 W peak typ

**MECHANICAL SPECIFICATIONS**

- Size (LxWxH) .............................. 230 x 254 x 170 mm
- Weight ...................................... 4.0 kg
- 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

**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)