



The **ACCVR-KaL family** of downconverters is designed for the most challenging Ka-band **professional & military** satellite communication systems (ground, SOTP, SOTM, maritime, etc.). Latest technology is applied to obtain the best noise figure, phase noise, gain stability and return losses according to **MIL-STD-188-164C**. The ACCVR-KaL 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

Input frequency .....	27.5 to 30.0 GHz
Input Ka-Band VSWR (50 Ω) .....	< 1.5:1
Output frequency .....	950 to 2450 MHz
Output L-band VSWR (50 Ω) .....	< 1.3:1
Spectrum inversion .....	None
Max. input level without damage .....	0 dBm
Gain @ mid band.....	30 ± 2 dB
Gain flatness .....	±2.0 dB over whole BW ±0.5 dB over 40 MHz
Gain stability (24 hours).....	±0.25 dB @ const. temp.
Gain variation over temperature .....	±1.5 dB
Noise figure .....	≤ 15 dB
Image rejection .....	> 45 dB
Output P1dB .....	> +10 dBm
In-band spurious .....	< -50 dBc @ P <sub>OUT</sub> = 0 dBm

#### LOCAL OSCILLATOR

Output phase noise	Max.	Typ.
10 Hz .....	-45 dBc/Hz	-50 dBc/Hz
100 Hz .....	-70 dBc/Hz	-75 dBc/Hz
1 kHz .....	-85 dBc/Hz	-90 dBc/Hz
10 kHz .....	-90 dBc/Hz	-95 dBc/Hz
100 kHz .....	-100 dBc/Hz	-105 dBc/Hz
1 MHz .....	-120 dBc/Hz	-125 dBc/Hz

  

Internal reference .....	10 MHz (Auto external on presence)
External reference level .....	0 dBm ± 5 dB
Internal reference stability .....	±2 ppb/day

#### POWER SUPPLY

DC input voltage .....	15-24 V <sub>DC</sub>
Consumption .....	11 W typ steady state 13 W typ warm-up

#### MECHANICAL SPECIFICATIONS

Size (LxWxH) .....	180 x 100 x 40 mm 7.1 x 3.9 x 1.6 in
Weight .....	1150 g 2.5 lbs
Finish .....	RAL 9003 (White)

#### ENVIRONMENTAL SPECIFICATIONS

Storage temperature .....	-40 °C to +85 °C
Operating temperature .....	-30 °C to +60 °C
Relative humidity .....	up to 100%
Operating altitude .....	up to 4500 m

#### INTERFACES

RX input (Ka-Band) .....	Type K(F) 50 Ω
RX outputs (L-Band) .....	Type N(F) 50 Ω
External reference .....	Type SMA(F) 50 Ω
Power supply & alarm .....	62IN12E8-4S-4-622

*All mating connectors provided*

#### OPTIONS

Ka-band input	L-band output	LO freq.	Standard freq. option
27.5 to 29.0 GHz	950 to 2450 MHz	26.550 GHz @ Path 1	ACCVR-KaL-E28-V4
28.5 to 30.0 GHz	950 to 2450 MHz	27.550 GHz @ Path 2	