



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 _{OUT} = 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 _{DC}
Consumption	10 W typ steady state 12 W typ warm-up

MECHANICAL SPECIFICATIONS

Size (LxWxH)	180 x 100 x 40 mm (TBC) 7.1 x 3.9 x 1.6 in (TBC)
Weight	1150 g (TBC) 2.5 lbs (TBC)
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	