



The **ACCVT-LKa family** of upconverters 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 power efficiency, phase noise, gain stability and return losses according to **MIL-STD-188-164C**. The ACCVT-LKa 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.

TRANSMITTER SPECIFICATIONS

Input frequency	950 to 2450 MHz
Input L-Band VSWR (50 Ω)	< 1.3:1
Output frequency	27.5 to 30.0 GHz
Output Ka-band VSWR (50 Ω)	< 1.3:1
Spectrum inversion	None
Max. input level without damage	0 dBm
P1dB	≥ +10 dBm
OIP3	≥ +20 dBm
Spurious signal related	< -60 dBc @ P _{OUT} = 0 dBm
Spurious signal independent	< -75 dBm
Gain @ mid band.....	35 ± 1 dB @ min. attenuation
Gain adjustment range	30 dB with 0.25 dB steps
Gain flatness	±1.0 dB over 1500 MHz
	±0.5 dB over 40 MHz
Gain stability (24 hours).....	±0.25 dB @ const. temp.
Gain variation over temperature	±0.5 dB
Positive slope equalizer range	0 - 9 dB
Mute	> 75 dB
Noise figure	< 15 dB @ min. attenuation
Group delay	< 1 ns pp over any 80 MHz
Inputs/Output sample ports	-10 ± 3 dB

LOCAL OSCILLATOR

Output phase noise	Max.	Typ.
10 Hz	-50 dBc/Hz	-55 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	
External reference level	5 dBm ± 5 dB	
Internal reference stability	±2 ppb/day	

POWER SUPPLY

DC input voltage	15-24 V _{DC}
Consumption	17 W typ steady state
	21 W typ warm-up

MECHANICAL SPECIFICATIONS

Size (LxWxH)	245 x 240 x 45 mm
	9.6 x 9.4 x 1.8 in
Weight	3.2 kg
	7.0 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

TX inputs (L-Band)	Type N(F) 50 Ω
Input samples (L-Band)	Type SMA(F) 50 Ω
TX output (Ka-Band)	Type K(F) 50 Ω
Output sample (Ka-Band)	Type K(F) 50 Ω
External reference	Type SMA(F) 50 Ω
M&C (RS232/485)	62IN12E12-14S-4-622
M&C (Ethernet/SNMP)	RJF22G
Power supply & alarm.....	62IN12E8-4S-4-622

All mating connectors provided

OPTIONS

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