



The **ACCVT-LX family** of upconverters is designed for the most challenging X-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 spurs rejection according to **MIL-STD-188-164C**. The ACCVT-LX 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 1450 MHz
Input L-Band VSWR (50 Ω) .....	< 1.3:1
Output frequency .....	7.9 to 8.4 GHz
Output X-band VSWR (50 Ω) .....	< 1.3:1
Spectrum inversion .....	None
Max. input level without damage .....	+10 dBm
P1dB .....	≥ +13 dBm
Spurious signal related .....	< -65 dBc @ P <sub>OUT</sub> = 0 dBm
Spurious signal independent .....	< -75 dBm
TOI .....	< -50 dBc (2 carriers 0 dBm each)
Gain .....	30 ± 3 dB @ min. attenuation
Gain adjustment range .....	30 dB with 0.2 dB steps
Gain flatness .....	±1.0 dB over whole BW
	±0.25 dB over 40 MHz
Gain stability (24 hours) .....	±0.25 dB @ const. temp.
Gain variation over temperature .....	±1.5 dB
Mute .....	> 60 dB
Noise figure .....	< 15 dB @ min. attenuation
Image rejection .....	> 60 dB
Input & Output signal monitors .....	-20 ± 2 dBc

### LOCAL OSCILLATOR

Output phase noise (IESS-308/309 – 10 dB)	
10 Hz .....	-50 dBc/Hz
100 Hz .....	-70 dBc/Hz
1 kHz .....	-80 dBc/Hz
10 kHz .....	-90 dBc/Hz
100 kHz .....	-100 dBc/Hz
Reference mode .....	Internal (Auto external on presence)
External reference .....	5 & 10 MHz
External reference level .....	+4 dBm ± 3 dB
Internal reference stability .....	±1x10 <sup>-9</sup> /day typ
	±5x10 <sup>-9</sup> in the whole temp. range

### POWER SUPPLY

AC input voltage .....	85-265 V <sub>AC</sub> (47-63 Hz)
Consumption .....	25 W typ

### MECHANICAL SPECIFICATIONS

Size (LxWxH) .....	508 x 128 x 38.5 mm
	20 x 5.0 x 1.5 in
Weight .....	2.0 kg
	4.4 lbs
Compatible rack frames .....	ACRC-V31 (3 bays over 1U)
	ACRC-V62 (6 bays over 2U)

### ENVIRONMENTAL SPECIFICATIONS

Storage temperature .....	-40 °C to +70 °C
Operating temperature .....	0 °C to +50 °C
Relative humidity .....	up to 95%
Operating altitude .....	up to 3000 m
Shock & vibration .....	MIL-STD-810H Method 514.8 Procedure II
EMC .....	CE Mark ETSI EN 301 489-1 V.1.9.2

### INTERFACES

TX input & monitor (L-band) .....	Type SMA(F) 50 Ω
TX output & monitor (C-Band) .....	Type SMA(F) 50 Ω
LO monitor & Ext. Ref. input .....	Type SMA(F) 50 Ω
M&C (Main interface RS422/485) .....	D-Sub9
M&C (Redundancy interface) .....	D-Sub9
M&C (Ethernet/SNMP interface) .....	RJ-45
Power supply .....	IEC 320

*All mating connectors provided*

### OPTIONS

L-band input	X-band output	LO freq.	Standard freq. option
950 to 1450 MHz	7.9 to 8.4 GHz	6.950 GHz	ACCVT-LX-E1-V31