



The **ACCVT-LKa family** of BUCs 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 linear power 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 2050 MHz (see options)
Input L-Band VSWR (50 Ω) .....	< 1.5:1
Output frequency .....	27.5 to 31.0 GHz (see options)
Output Ka-band VSWR (50 Ω) .....	< 1.5:1
Spectrum inversion .....	None
Max. input level without damage .....	0 dB
P1dB .....	≥ +15 dBm
Spurious signal related .....	< -60 dBc @ P <sub>OUT</sub> = 0 dBm Including LO + 2 x IF spur
Spurious signal independent .....	< -60 dBm
TOI .....	< -45 dBc (2 carriers 0 dBm each)
Gain .....	> 30 dB @ min. attenuation
Gain adjustment range .....	20 dB with 0.5 dB steps
Gain flatness .....	±2.0 dB over 1000 MHz ±1.5 dB over 500 MHz ±0.5 dB over 40 MHz
Gain stability (24 hours).....	±0.25 dB @ const. temp.
Gain variation over temperature .....	±1.0 dB
Mute .....	> 60 dB
Noise figure .....	< 20 dB @ min. attenuation

### LOCAL OSCILLATOR

Output phase noise (IESS-308/309 – 5 dB)	
100 Hz .....	-65 dBc/Hz
1 kHz .....	-75 dBc/Hz
10 kHz .....	-85 dBc/Hz
100 kHz .....	-95 dBc/Hz
External reference .....	10 MHz
External reference level.....	0 dBm ± 3 dB

### POWER SUPPLY

DC input voltage .....	12 V <sub>DC</sub>
Consumption .....	1 A

### MECHANICAL SPECIFICATIONS

Size (LxWxH) .....	227 x 120 x 30 mm 8.9 x 4.7 x 1.2 in
Weight .....	1.2 kg 2.6 lbs
Finish .....	Transparent conductive treatment

### ENVIRONMENTAL SPECIFICATIONS

Storage temperature .....	-40 °C to +85 °C
Operating temperature .....	-20 °C to +60 °C
Relative humidity .....	up to 95%
Operating altitude .....	up to 3000 m

### INTERFACES

TX input (L-Band + Ext. Ref.) .....	Type SMA(F) 50 Ω
TX output (Ka-Band) .....	Type K(F) 50 Ω
Power supply and M&C .....	S8B-PH-SM4-TB(LF)(SN)
<i>All mating connectors provided</i>	

### OPTIONS

Ka-band output	L-band input	LO freq.	Standard freq. option
27.5 to 28.5 GHz	950 to 1950 MHz	26.550 GHz	ACCVT-LKa-E26-V1
28.4 to 29.5 GHz	950 to 2050 MHz	27.450 GHz	
29.3 to 30.0 GHz	950 to 1650 MHz	28.350 GHz	
27.5 to 28.5 GHz	950 to 1950 MHz	26.550 GHz	ACCVT-LKa-E27-V1
28.4 to 29.5 GHz	950 to 2050 MHz	27.450 GHz	
29.3 to 30.0 GHz	950 to 1650 MHz	28.350 GHz	
30.0 to 31.0 GHz	1000 to 2000 MHz	29.000 GHz	