



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 _{OUT} = 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 _{DC}
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 (TTL)	S8B-PH-SM4-TB(LF)(SN)
Serial port RS-485	S6B-PH-SM4-TB(LF)(SN)

All mating connectors provided

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	