



The **ACTLT-Ku family** of TLTs is designed for the most challenging Ku-band **professional & military** satellite communication systems. Latest technology is applied to obtain the best efficient frequency conversion, phase noise, gain stability and spurious rejection. The ACTLT-Ku 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	13.75 to 14.5 GHz
Input Ku-Band VSWR (50 Ω)	< 1.5:1
Input level	0 to -30 dBm with internal AGC
Output frequency	10.7 to 12.75 GHz
Output Ku-band VSWR (50 Ω)	< 1.5:1
Output level	-20 to -50 dBm (M&C adjustment)
Spurious signal dependent	< -50 dBc @ P _{OUT} = -30 dBm
Spurious signal independent	< -60 dBm
Gain adjustment range	30 dB
Gain adjustment step	1.0 dB
Gain flatness	±1.5 dB
Gain variation over temperature	±1.5 dB
Noise figure	≤ 15 dB (min. input max. output)
Image rejection	> 60 dB
Mute	> 50 dB

LOCAL OSCILLATOR

LO frequency	LO ₁ (RF output 10.70-11.45 GHz)
	LO ₂ (RF output 11.25-12.00 GHz)
	LO ₃ (RF output 12.00-12.75 GHz)
LO bandwidth	±5 MHz
Frequency step	1 kHz
Output phase noise (IESS-308/309 – 10 dB)	
100 Hz	-70 dBc/Hz
1 kHz	-80 dBc/Hz
10 kHz	-90 dBc/Hz
Reference mode	Internal (auto external on presence)
External reference	10 MHz
External reference level	0 dBm ± 3 dB
Internal reference stability	±2x10 ⁻⁸ /day
	±1x10 ⁻⁷ /year

POWER SUPPLY

AC input voltage.....	85-265 V _{AC} (47-63 Hz)
Consumption.....	30 W

MECHANICAL SPECIFICATIONS

Size (LxWxH).....	350 x 240 x 65 mm
	13.8 x 9.5 x 2.6 in
Weight	7.0 kg
	15.4 lbs
Finish	RAL 9003 (White)

ENVIRONMENTAL SPECIFICATIONS

Storage temperature.....	-40 °C to +85 °C
Operating temperature.....	-20 °C to +60 °C
Relative humidity	up to 100%
Operating altitude	up to 3000 m

INTERFACES

RF input (Ku-Band)	Type N(F) 50 Ω
RF output (Ku-Band)	Type N(F) 50 Ω
LO monitor	Type SMA(F) 50 Ω
External reference	Type BNC(F) 50 Ω
Power supply	62IN12E12-3P-4-622
M&C (RS232/485)	62IN12E12-14S-4-622
M&C (Ethernet/SNMP)	RJF21G

All mating connectors provided