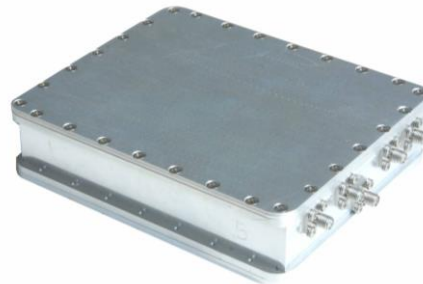


C-BAND FREQUENCY SYNTHESIZER

ACSINT-C Series



Ed.01
23/09/10

ACSINT-C series are a state of art frequency synthesizers designed to meet the hardest requirements of the modern satellite communication systems. Leading the customer's needs, ACORDE Technologies has complied requirement of 1 kHz frequency step, wide bandwidth with an excellent spurious rejection. ACSINT-C series cover required frequency bandwidth for all C-band Rx/Tx frequency converters.

Synthesizers can be operated via remote control RS232 and RS422/485. Operating temperature range is 0°C to +50°C (-20°C to +55°C option in outdoor enclosure is also available).

SYNTHESIZER SPECIFICATIONS

Output impedance	50 Ω
Output power @ 25°C	+13 dBm min
Output flatness	± 1.0 dB over the whole bandwidth
Output stability vs temperature	± 1.0 dB over the whole range
Output sample ports.....	-20 dBc
Frequency step	1 kHz (See options)
Frequency accuracy	< 0.001Hz
RF 2nd Harmonic suppression	< -25dBc
Fixed PLO 2nd Harmonic suppression	< -60dBc
Spurious in-band	< -60dBc
Spurious out-of-band.....	< -70dBc
Output phase noise (IESS-308/309 – 10 dB):	
100 Hz.....	-70 dBc/Hz
1 kHz.....	-80 dBc/Hz
10 kHz.....	-90 dBc/Hz
100 kHz.....	-100 dBc/Hz
Reference frequency	10 MHz (5 MHz as option)
Reference input level	0 dBm ± 5 dB
LO frequency stability.....	same as external reference
Acquisition time (to phase lock)	500 ms max
Minimum external reference to compliant typical phase noise (IESS-308/309 – 10 dB):	
100 Hz.....	-135 dBc/Hz
1 kHz.....	-145 dBc/Hz
10 kHz.....	-155 dBc/Hz

▼ POWER SUPPLY

DC input voltage 1+7 VDC (1200 mA typ.)
 DC input voltage 2+15 VDC (30 mA typ.)

▼ ENVIRONMENTAL SPECIFICATIONS

Storage temperature-40 to +80°C
 Operating temperature0 to +50°C (-20 to +55°C as option)
 Relative humidityup to 100%
 Operating altitudeup to 3500 m

▼ MECHANICAL SPECIFICATIONS

Interfaces:

RF outputSMA female 50 Ω
 RF monitor:.....SMA female 50 Ω
 Fixed LO outputSMA female 50 Ω
 Fixed LO monitorSMA female 50 Ω
 Reference input.....SMA female 50 Ω
 Serial port RS485S6B-PH-SM4-TB
 Power supply +7VDCFeedthrough 7A
 Power supply +15 VDCFeedthrough 7A
 Cooling systemNone
 Dimensions.....156 x 129 x 38 mm
 Weight.....1.1 kg

▼ OPTIONS

Frequency band	Step size ⁽¹⁾	Fixed LO frequency ⁽²⁾	Model Number
4.63 to 5.205 GHz	125 kHz	1150 MHz	ACSINT-C-E1-V1-xxx
4.63 to 5.205 GHz	1 kHz	1150 MHz	ACSINT-C-E1-V2-xxx
5.84 to 6.64 GHz	125 kHz	2510 MHz	ACSINT-C-E6-V1-xxx
5.84 to 6.64 GHz	1 kHz	2510 MHz	ACSINT-C-E6-V2-xxx

SY1:External 5 MHz Reference
 SY2:Operating temperature (-20 to +55°C)
 SCC:Custom Design

⁽¹⁾ Other frequency steps up to 1 Hz upon request

⁽²⁾ Fixed LO frequency available at L and S band in 5 MHz step