

Fast Switching Indirect Synthesizers

Features

- ◆ Typical bandwidth 250 MHz
- ◆ Low phase noise
- ◆ Switching speeds from 10 microseconds
- ◆ Step sizes from 1 Hz
- ◆ Low spurious
- ◆ Lock alarm
- ◆ High reliability
- ◆ Low sensitivity to microphonics
- ◆ External reference capability

Options

- ◆ Reference out
- ◆ Harmonic filters
- ◆ Custom step sizes
- ◆ Custom frequency bands
- ◆ Internal reference
- ◆ Expanded bandwidth

Description

Herley-CTI (HCTI) Series FSX, low noise microwave synthesizers are designed to deliver high performance in a compact package. The series FSX is ideally suited for Radar system applications where wide frequency coverage, phase noise and fast switching speeds are critical parameters. To meet the demands of these applications the series FSX incorporates proven techniques for phase hit suppression and features low phase noise, typically -132 dBc/Hz at 100 kHz offset at 8 GHz. In addition, other features include switching speeds

from 10 microseconds and frequency selection via Parallel TTL.

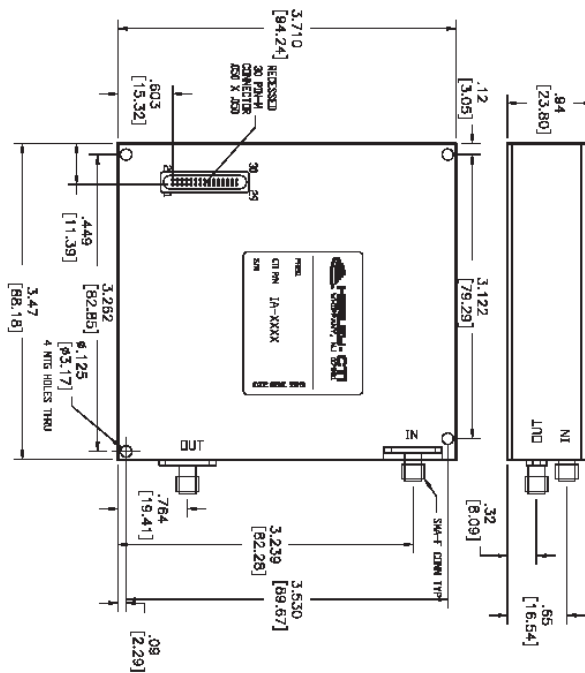
Herley-CTI can also custom configure the FSX for particular system requirements as well as military requirements. Contact the factory to discuss the specific details of your particular application and requirements.



Typical Performance Specifications

Frequency Range	2 GHz to 14 GHz with a typical bandwidth of 250 MHz				
Custom Bandwidths	Up to 600 MHz				
Step Size	From 1 Hz				
Phase Noise @ 8 GHz	Offset from carrier frequency				
	100 Hz dBc/Hz	1 kHz dBc/Hz	10 kHz dBc/Hz	100 kHz dBc/Hz	1 MHz dBc/Hz
	-84	-102	-114	-132	-139
Power	+10 dBm min, +/- 2 dB flatness over frequency & temperature				
Spurious	-62 dBc				
Harmonics	-30 dBc				
External Reference	Locks to 100 MHz external reference				
Frequency Accuracy	+/-0.25 Hz				
Lock Alarm	TTL/ CMOS Logic				
Switching Speed	from 1 to 20 microseconds depending on step size, consult factory				
Supply Voltage	+3.3Vdc @ 1.2 A typ, +6 Vdc @ 600 mA typ, -6 Vdc @ 50 mA typ +12 Vdc @ 600 mA typ surge, 300 mA Steady State typ				
Operating Temperature	0°C to +70°C baseplate; Consult factory for wider temperature ranges				
RF Connectors	SMA-F				

Typical Outline Drawing



Note: All specifications subject to change without notice.

9 Whippany Road, Whippany, NJ 07981 ■ Tel: 973-884-2580 Fax: 973-887-6245 ■ E-mail: Sales@herley-cti.com ■ Website: www.herley.com