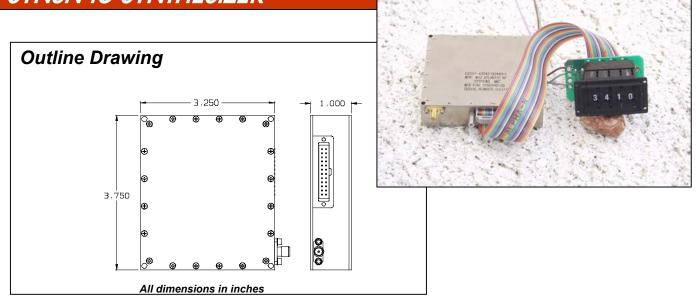


Mid-Atlantic RF Systems Inc. P.O. Box 745 Forest Hill, MD 21050

SYNSN45 SYNTHESIZER



## Overview

Mid-Atlantic RF Systems, Inc. offers a dual loop S-band Stable Local Oscillator (STALO) tunable in 1 MHz steps via serial port. A thumbwheel switch, RS232 or custom interface for frequency control are optional. The unit exhibits excellent phase noise, frequency stability and low power consumption.

The RF output connector is SMA (f). Ask for custom frequency, power level control and other options to meet your specifications.

Electrical Specifications:	
RF Output	
<b>Carrier Frequency:</b>	3210MHz to 3410MHz
Resolution:	1MHz steps
<b>Frequency Selection:</b>	TWS, RS232, custom
Carrier Stability:	$\pm 5$ PPM over temperature
Power:	$+17$ dBm $\pm 1.5$ dB
Phase Lock Indicator:	TTL high in lock
VSWR:	1.5:1
Impedance:	50Ω nom.
Phase Noise:	-70dbc/Hz @ 100Hz
	-90dBc/Hz @ 1kHz
	-95dBc/Hz @ 10kHz
	-108dBc/Hz @ 100kHz
	-120dBc/Hz @ 1MHz
Spurious	
In band:	-75dBc min
Out of band:	-59dBc min
Harmonics:	-20dBc min
DC Power	$15 \pm 2.5$ V, 5.75W typical

Mechanical Specifications:	
<b>Dimensions:</b>	3.75" x 3.25" x 1", aluminum Ni
	plated enclosure
<b>Connectors:</b>	24 pin header; SMA (f)

## Environmental Specifications:

**Operating Temperature:** 0°C to +55°C **Storage and transport:** -40°C to +55°C