

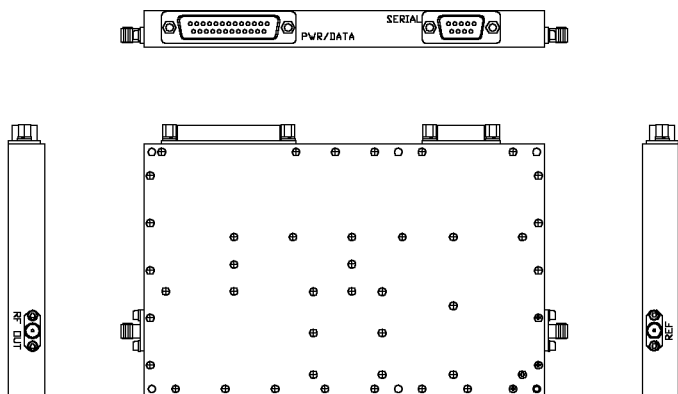
## SYNTHESIZER – CW SOURCE 1.0 – 1.5 GHz



### features

- Low phase noise
- Low spurious (-75 dBc max)
- Computer Controlled (RS-232C)
- 0 °C to 70°C operating range
- Shielded design
- Internal frequency reference

### dimensions and connections



6.25" W x 3.94" L x 0.57" H  
 J4 - 9-pin D-sub Jack  
 J5-25-pin D-sub Plug

#### PIN CONNECTIONS

RF OUT	J2 (SMA Jack)
RS-232 Data Out	J4(2)
RS-232 Data In	J4(3)
RS-232 GND	J4(5)
+12 VDC	J5(1)
+12 V RTN	J5(2)
- 8 V RTN	J5(3)
-8 VDC	J5(4)
LOCK DETECT	J5(5)
BAND SELECT	J5(12) Not Used
Digital GND	J5(15)

### description

This programmable signal source is completely self-contained with an internal TCXO reference. The synthesizer can be either serially loaded through the RS-232C control port or set up to power on at a pre-determined frequency. This source is suitable for use in dedicated test setups or as a component of a production system.

### typical specifications

RF Out Freq (MHz)	1000 - 1500
Ref Osc (MHz)	INTERNAL 10.0 MHz
Freq Step Size (kHz)	1000
Pout (dBm over freq)	5.0 +/- 1.5
Spurious (dBc)	-75
Frequency Stability (ppm)	+/- 2.5
SSB Phase Noise (dBc/Hz)	
1 kHz offset	80
10 kHz offset	80
100 kHz offset	110

**DC Power:** +12.0 V @ 200 mA maximum

### absolute maximum ratings

Temp, Case Operating:	-10 to 70°C
Temp, Storage:	-55 to 150°C
DC Volts:	+15.0V

# TEST SOURCE SYNTHESIZER 1.0 – 1.5 GHz

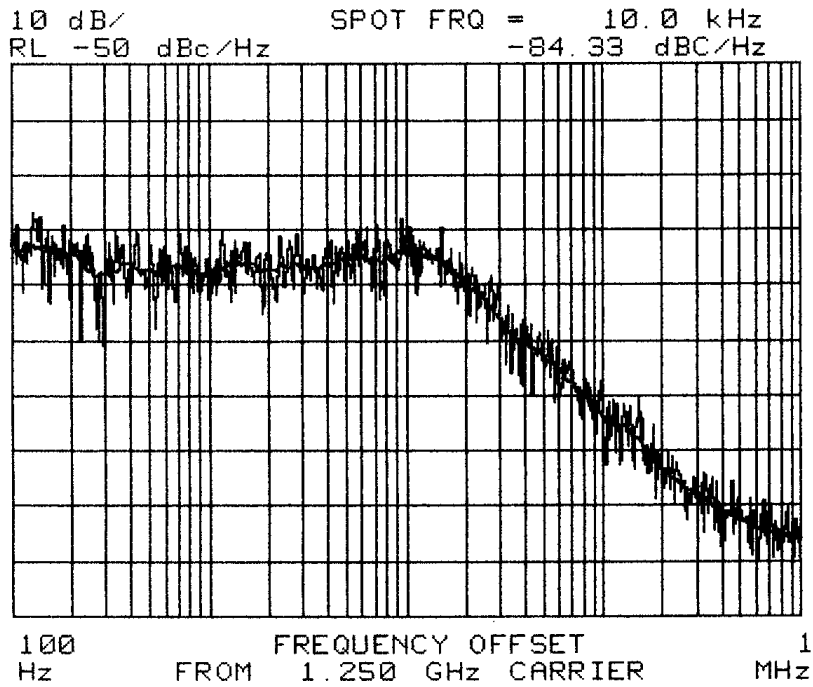


Figure 1 - Output Spectrum - Phase Noise

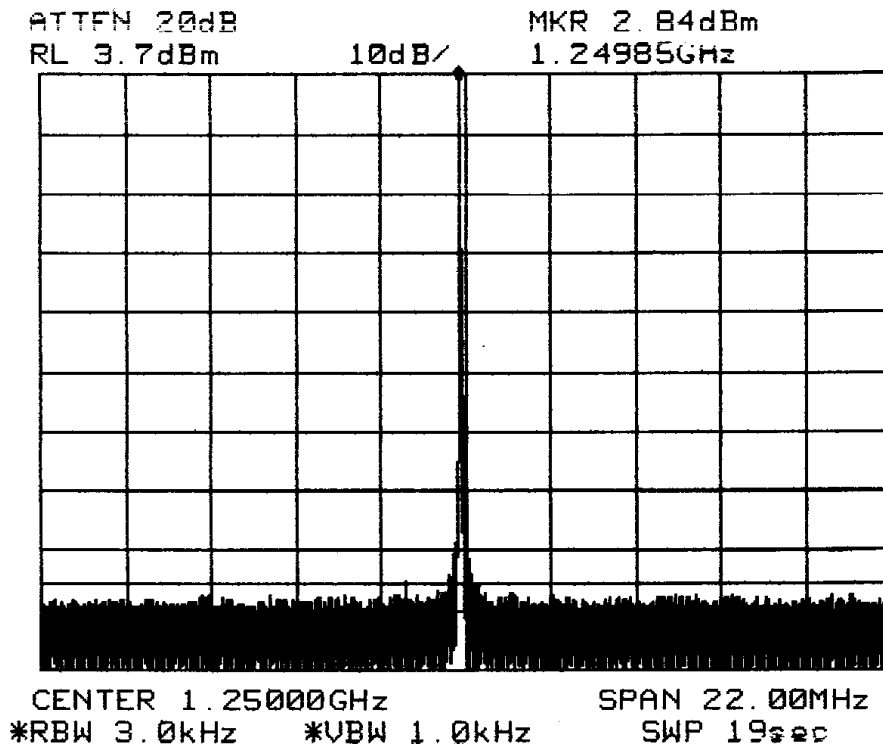


Figure 2 - Output Spectrum - Spurious