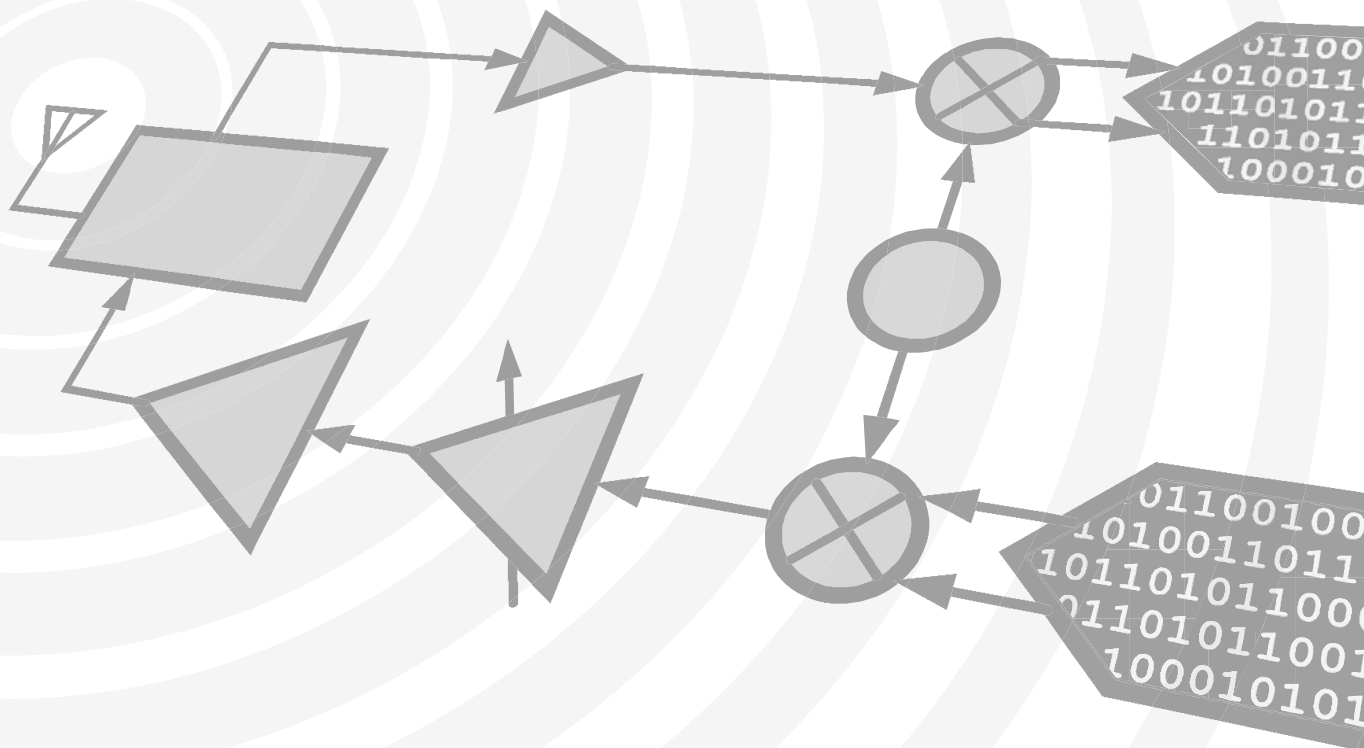




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HMC-T2000

SYNTHESIZED SIGNAL GENERATOR, 700 MHz to 8 GHz



The HMC-T2000 is an easy to implement test equipment solution designed to fulfill your signal generation needs. Built on a foundation of high quality and market leading Hittite MMICs, the HMC-T2000 provides the highest output power, lowest harmonic levels and broadest frequency range amongst signal generators of its size and cost.

This compact and lightweight signal generator also features a USB interface and innovative control software ensuring carefree integration within various test environments while improving overall productivity and equipment utilization.

Applications

- ◆ ATE
- ◆ Test & Measurement
- ◆ R&D Laboratories

Advantages

- ◆ Versatile: Higher Drive Simplifies Test Set-Ups
- ◆ Efficient: Fast Frequency Switching: 200 μ s
- ◆ Accurate: Incorporates Hittite MMICs
- ◆ Flexible: Manual or Software Control

Performance

- ◆ High Output Power: +17 dBm
- ◆ Wide Frequency Range:
700 MHz to 8 GHz
- ◆ Spurious Rejection: < -45 dBc
- ◆ Phase Continuity Capability:
Integer Mode Architecture

HMC-T2000

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Frequency

Accuracy: As Per Internal Ref. ± 2.0 ppm
Resolution: 1 MHz
Power Slope: 0 to 0.8 dB/GHz
Internal Reference : 10 MHz
Aging Rate: <1 ppm/yr
Temperature Stability: <0.5 ppm
External Reference Input:
-10 dBm to +5 dBm into 50 Ohms
10 MHz square, 200 to 1200 mVp-p
Internal Reference Output: 10 MHz (LVTTL)

Output Power (Maximum Leveled)

Frequency (GHz)	Power Output (dBm)*
0.7 to 2.6	+17
2.6 to 5.0	+15
5.0 to 6.0	+13
6.0 to 8.0	+10

Minimum Settable: -18 dBm @ 8 GHz
Dynamic Range: 31 dB
Resolution: 0.5 dBm
Output Source Match: < 2.0:1
Power Accuracy: ± 1 dB from -18 to +20 dBm

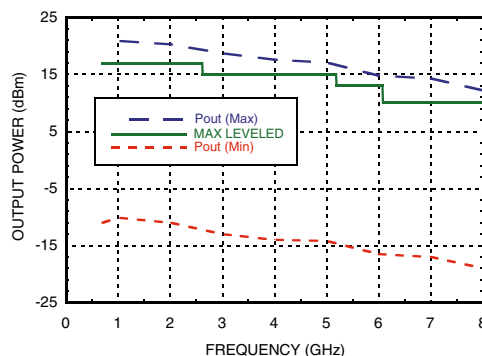
Spectral Purity

Harmonics

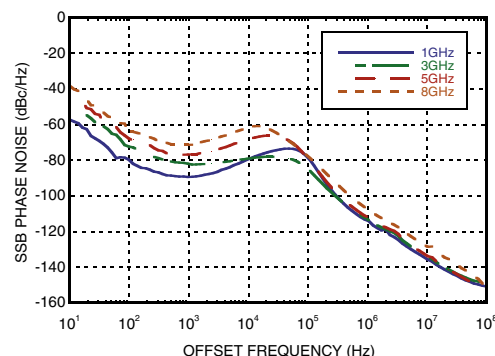
Frequency (GHz)	2nd Harmonics	3rd Harmonics	Spurious (dBc)
1	-30	-44	-57
4	-33	-54	-55
8	-26	-56	-45

Output Power = +10 dBm

Output Power Range @ 25°C



SSB Phase Noise vs. Frequency



SSB Phase Noise

Frequency (GHz)	Offset From Carrier					
	100 Hz	1 kHz	10 kHz	100 kHz	1 MHz	10 MHz
1 GHz	-79	-83	-79	-78	-113	-127
4 GHz	-67	-79	-74	-87	-111	-133
8 GHz	-65	-72	-65	-72	-106	-128

Output Noise: Floor < -150 dBm/Hz

General Specifications

Power - AC:

100 to 240 VAC @ 50 to 60 Hz

Calibration:

1 Year

Environment (for indoor use only):

0 to 35 °C

Cooling:

Convection

Input / Output:

RF Out: N-type Connector
10 MHz Ref : BNC Connector
USB 1.1 / 2.0

Mechanical Vibration & Shock:

MIL PRF-288000 Class 4

Compliance:

EMC EN55022:1998 / A2:2000 / A2:2003

EN61326:1997 / A1:1998 / A2:2001 / A3:2003

Safety IEC / EN 61010-1:2001

General Mechanical Characteristics

H: 63.5 mm (2.5 in)
W: 184 mm (7.25 in)
D: 254 mm (10 in)
Weight 1.6 kg (3.5 lbs)

Warranty: 1 Year Parts and Labor

All specifications apply over +15°C to +35°C ambient range after 30 minutes of warm-up time unless otherwise stated.



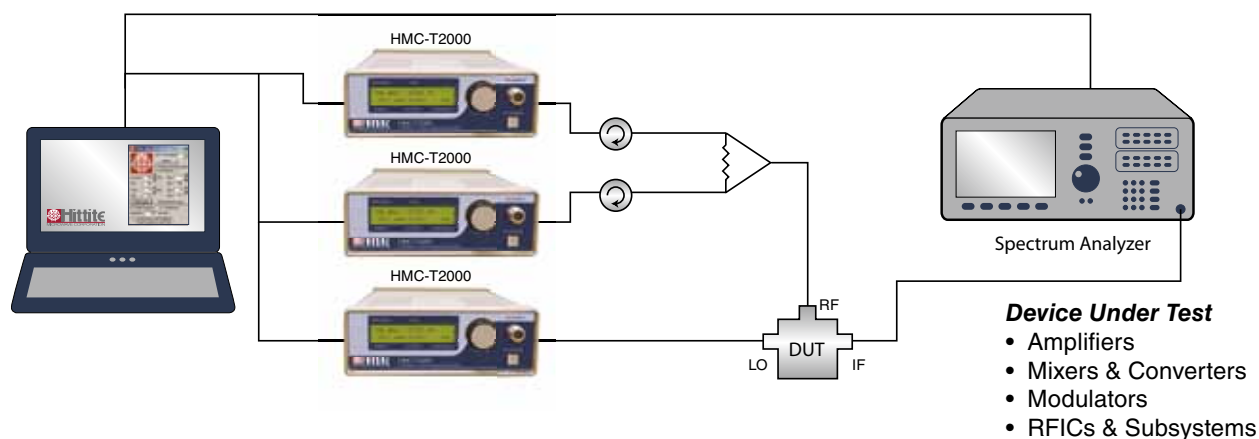
20 Alpha Road Chelmsford, MA 01824
Phone: 978-250-3343 Fax: 978-250-3373
Order Online at www.hittite.com

HMC-T2000

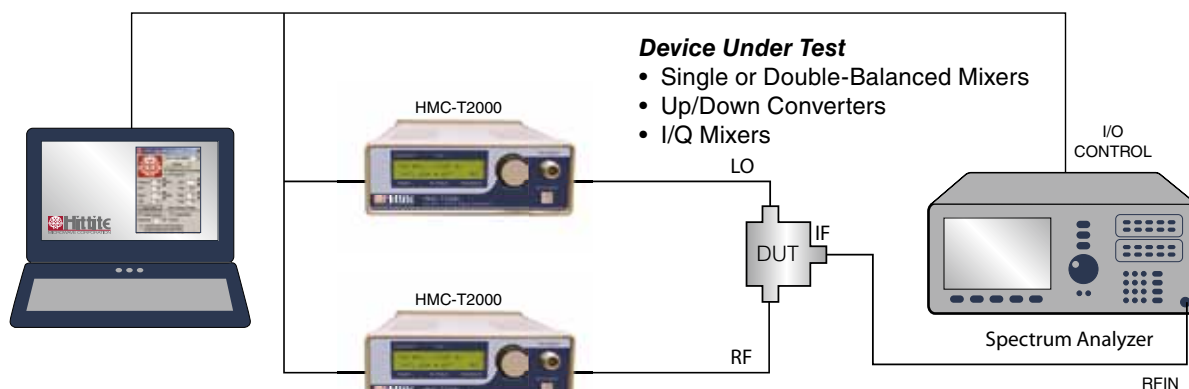
SYNTHESIZED SIGNAL GENERATOR, 700 MHz to 8 GHz

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Two Tone Third Order Intercept Test Set-up



Efficient Mixer Conversion Loss, Isolation & MxN Spurious Test Set-up



HMC-T2000 Rear Panel I/O Connections



HMC-T2000

SYNTHESIZED SIGNAL GENERATOR, 700 MHz to 8 GHz

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Connectivity & Control

Its compact size, light weight, fast switching speed and USB control interface ensures a smooth integration within all test environments particularly those associated with automated test. An installation disk that accompanies each unit includes all the drivers required to remotely control the device as well as a user friendly GUI interface (right) compatible with a Windows XP® or Windows Vista® operating system. User control is facilitated via pull down menus that allow programming of single or swept modes in frequency and/or power. Integration of multiple units within a production test environment is easy, and affordable due to the incorporation of integer mode architecture and its ability to maintain phase coherence between frequency steps.

Remote Interface

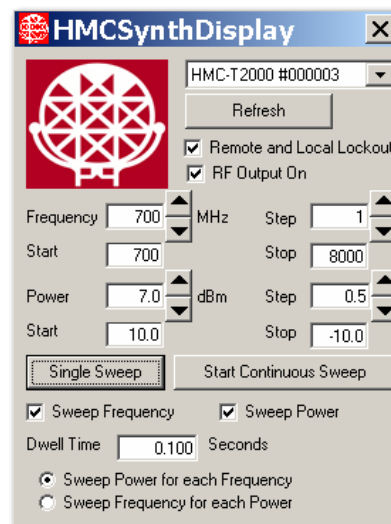
Hardware: USB (Windows XP®, Windows Vista® Drivers Supplied)

Software: LabVIEW/ Driver (XP)

Frequency Switching Speed:
< 200µ sec @ 100 MHz Steps

Local Interface

Front Panel Rotary Knob & Display



Ordering Information

Model Number	Description	Price
HMC-T2000	Synthesized Signal Generator 700 MHz to 8 GHz	\$3,998.00

Includes 100-240V AC Power Supply and Power Cord of Choice (see below)

Power Cord

Part Number	Region
HMC-PC01	Continental Europe
HMC-PC02	United Kingdom
HMC-PC03	China
HMC-PC04	Australia, New Zealand
HMC-PC05	North America
HMC-PC06	South Africa / India
HMC-PC07	Switzerland
HMC-PC08	Denmark
HMC-PC09	Israel
HMC-PC10	Italy
HMC-PC11	Japan

Test Rack Mount Kit

Part Number	Description	Price
HMC-RM01	Dual Rack Mounting Plate 19" 2u Chassis	\$385.00



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All pricing is in U.S. Dollars and is subject to change without notice.



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