

## NSI-RF-7002

### HIGH SPEED DUAL SYNTHESIZER



#### DESCRIPTION

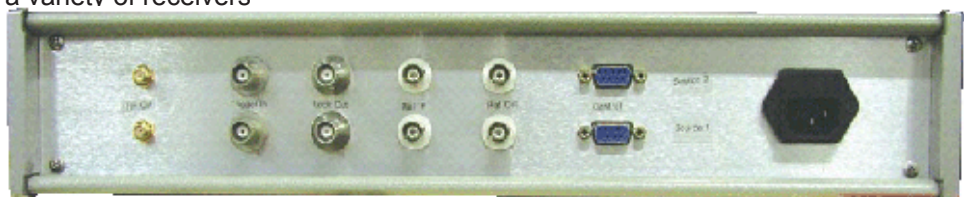
The NSI-RF-7002 Panther High Speed Microwave Synthesizer was designed specifically to address the demanding needs of the antenna test community. The Panther 7002 is a high performance synthesizer designed for high-throughput applications where speed and accuracy are required. The Panther 7002 is compatible with a wide variety of receivers, including the NSI Panther 6000 and the Agilent 8530A receivers.

#### CONSISTS OF THE FOLLOWING COMPONENTS

- Two high-speed source modules in 2U rack-mount case
- Driver for integration with NSI Antenna Measurement Software
- Driver for integration with NSI Panther 6000 Receiver with HSBC
- Power supply cord
- Installation and operation manual
- One year warranty.

#### FEATURES

- Up to 3,333 frequencies per second (300  $\mu$ sec pt.) - reducing antenna test time and improving range productivity
- 0.5 to 6.0 GHz
- Power output +10 dBm typical
- Compatible with a variety of receivers
- Fully integrated with NSI 4.0 data collection software
- Simple DLL interface for integration into automated test programs
- Low profile design
- Frequency list capability with TTL trigger control



Panther 7002 rear panel view showing I/O connections

SPECIFICATIONS	
Power Out	+10 dBm typical
Frequency Range	0.5 to 6.0 GHz
Frequency Switching Speed	3,333 frequencies per second (300 µsec/pt.)
Frequency Resolution	0.0005 GHz
Frequency List Size	4,000 entries in forward & reverse tables
Software Interface	Windows DLL
Computer Interface	RS-232, DB9 connector
Trigger Inputs	TTL, BNC connector
RF Outputs	SMA connector
Size (HxWxD)	3.5" x 17.0" x 13.0"
Controls and Indicators	DC Power and Trigger LED indicators
Frequency Reference In	5-50 MHz user selectable, BNC connector
Frequency Reference Out	User selectable, 25 MHz default, BNC connector

NSI2000 Antenna Measurement System

File View Measurements Processing Hardware Tools Window Help

Print Copy Measurements Nearfield Farfield Hologram Heat View Image Compare 3D

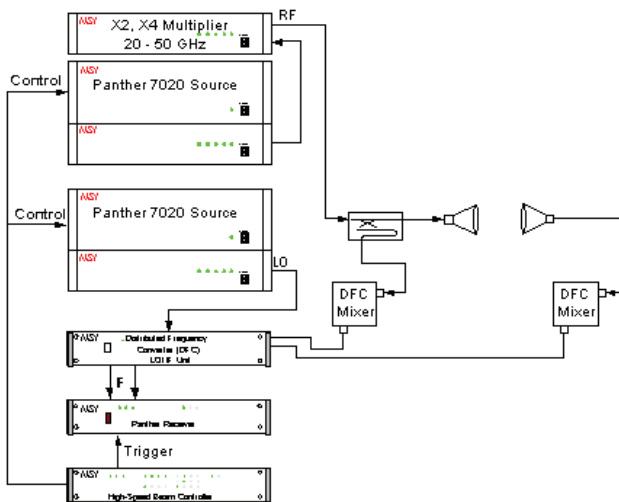
NSI 2000 filename: \_\_\_\_\_ Beams List

Plot all beams Fast Acq Full Acq Multi Acq RT Acq NF\_images

Multi-beam list: 11 Single-pol beams: 11 inner-loop beams, Pol: Outer-loop

Beam	Dwell	Frequency	Y axis	X axis	Pol axis	Amplitude	Phase	S/N	Max Amp	Delta
1	0.400000 mSec	8.000000 GHz	Y axis	X axis	Single-pol	-6.635 dB	145.54 deg	58. dB	-6.622 dB	0.037 dB
2	0.400000 mSec	8.500000 GHz	Y axis	X axis	Single-pol	-6.249 dB	-86.09 deg	57. dB	-6.233 dB	0.042 dB
3	0.400000 mSec	9.000000 GHz	Y axis	X axis	Single-pol	-6.498 dB	51.70 deg	58. dB	-6.478 dB	0.046 dB
4	0.400000 mSec	9.500000 GHz	Y axis	X axis	Single-pol	-6.440 dB	-170.49 deg	59. dB	-6.411 dB	0.052 dB
5	0.400000 mSec	10.000000 GHz	Y axis	X axis	Single-pol	-7.055 dB	-28.35 deg	56. dB	-7.037 dB	0.050 dB
6	0.400000 mSec	10.500000 GHz	Y axis	X axis	Single-pol	-7.059 dB	118.61 deg	54. dB	-7.042 dB	0.049 dB
7	0.400000 mSec	11.000000 GHz	Y axis	X axis	Single-pol	-8.319 dB	-94.95 deg	55. dB	-8.310 dB	0.056 dB
8	0.400000 mSec	11.500000 GHz	Y axis	X axis	Single-pol	-6.770 dB	41.87 deg	55. dB	-6.739 dB	0.058 dB
9	0.400000 mSec	12.000000 GHz	Y axis	X axis	Single-pol	-5.839 dB	-157.95 deg	56. dB	-5.819 dB	0.051 dB
10	0.400000 mSec	12.500000 GHz	Y axis	X axis	Single-pol	-6.801 dB	-34.52 deg	53. dB	-6.795 dB	0.045 dB
11	0.400000 mSec	13.000000 GHz	Y axis	X axis	Single-pol	-5.731 dB	122.02 deg	55. dB	-5.718 dB	0.056 dB

Compatible with NSI 2000 Antenna Measurement Software - this example shows a multi beam data set.



## DIMENSIONS

The Panther 7002 Synthesizer's built-in controller allows PC-based measurement application software to transfer frequency lists, timing, and other information during test setup. Once configured, the Panther 7002 allows simple, fast source control that can be used to free the measurement computer from critical timing requirements. The Panther 7002 supports TTL hardware triggering through individual rear-panel connectors.

NSI provides full program support for the Panther 7002 with the NSI 2000 Antenna Measurement Software. For other applications, NSI provides a driver for integration of the synthesizer with the Panther 6000 receiver with High Speed Beam Controller (HSBC). For stand-alone applications, NSI will provide the interface specification.

## ORDERING INFORMATION

Please contact the NSI Sales department to order this product.

### Nearfield Systems, Incorporated

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