



Agilent M9302A PXI Local Oscillator

DISCOVER the Alternatives...

Industries and Applications

- Aerospace and defense
- Wireless communications
- Radar and wideband signal capture

Product Description

The Agilent M9302A PXI Local Oscillator (LO) is a VCO-based 3 GHz to 10 GHz LO optimized for fast settling time to allow for fast frequency down conversion applications. The fast switching time and low phase noise of this LO make it an ideal component of a microwave vector signal analyzer.

Models

M9302A PXI Local Oscillator

Main Features and Benefits

Product features	Your benefit
Frequency range	3 GHz to 10 GHz
0.1 Hz tuning resolution	Greater frequency accuracy
1 ms settling time	Speeds up your test time
Multiple programmatic interfaces	Easy integration into existing test environments and reduced development time
PXI form-factor	Conforms to Modular Open Systems Approach (MOSA)

Chassis slot compatibility: cPCI (J1), PXI-1, PXI Hybrid



... Agilent **MODULAR** Products

Specifications

Hardware	
Size	2 slot 3U
Phase noise	-115 dBc/Hz at 10 GHz, 10 kHz offset
Frequency switching speed	1 ms, 500 μ s, typical
Power	+16 dBm \pm 2 dB
Frequency output	REF OUT: 10 MHz, (<i>nominal</i>) REF 1 OUT: 100 MHz, (<i>nominal</i>) REF 2 OUT: 100 MHz, (<i>nominal</i>)
Amplitude	REF OUT: 0 dBm \pm 3 dB (at 25 $^{\circ}$ C \pm 5 $^{\circ}$ C) REF 1 OUT: 0 dBm \pm 3 dB (at 25 $^{\circ}$ C \pm 5 $^{\circ}$ C) REF 2 OUT: 0 dBm \pm 3 dB (at 25 $^{\circ}$ C \pm 5 $^{\circ}$ C)
Frequency temperature stability	\pm 0.5 ppm (over 0 $^{\circ}$ C to 50 $^{\circ}$ C)
Aging (after 30 days of operation)	\pm 1.0 ppm/year



Agilent Technologies

Software

The M9302A Local Oscillator is supplied with a comprehensive portfolio of module drivers, documentation, examples, and software tools to help you quickly develop test systems with your software platform of choice.

A soft front panel interface is provided to monitor and control the PXI Local Oscillator with the following functions:

- Enabling LO
- Setting LO frequency and band switch frequency
- Enabling 10 MHz and 100 MHz REF signals
- Monitoring hardware status

Supported operating systems	Microsoft Windows® XP (32-bit), Microsoft Windows® Vista (32/64-bit), Microsoft Windows® 7 (32/64-bit)
Standard compliant drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Supported application development environments (ADE)	VisualStudio® (VB.NET, C#, C/C++), VEE, LabVIEW, LabWindows/CVI, MATLAB
Agilent IO Libraries	Includes: VISA Libraries, Agilent Connection Expert, IO Monitor

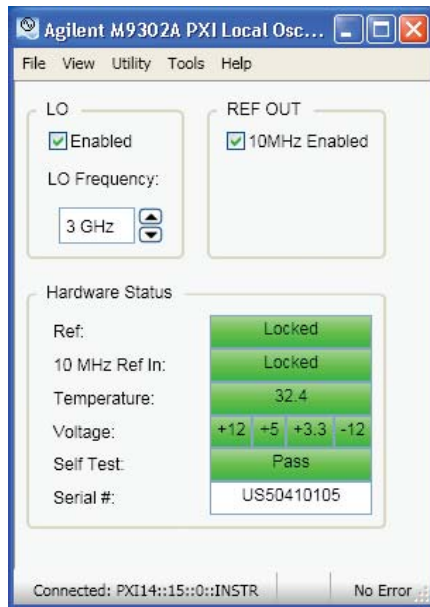


Figure 1. Agilent M9302A PXI Local Oscillator, software interface.

M9302A LO

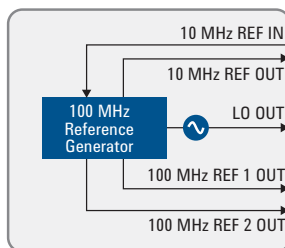


Figure 2. Simplified block diagram of the M9302A PXI Local Oscillator.

Ordering Information

Typical Product Configuration

Model	Description
M9302A	PXI Local Oscillator: 3 GHz to 10 GHz

Related products

M9202A	PXIe IF Digitizer: 12-bit, 2 GS/s
M9360A	PXI Attenuator/Preselector: 100 kHz to 26.5 GHz
M9361A	PXI Downconverter: 2.75 MHz to 26.5 GHz
M9351A	PXI Downconverter: 50 MHz to 2.9 GHz
M9392A	PXI Vector Signal Analyzer: 50 MHz to 26.5 GHz
M9036A	PXIe Embedded Controller

Accessories

Software, example programs, and product information on CD
Cables

Advantage Services: Calibration and Warranty

Agilent Advantage Services is committed to your success throughout your equipment's lifetime.

R1282A	Annual calibration
R-51B-001-3C	1 year return-to-Agilent warranty extended to 3 years
R-51B-001-5C	1 year return-to-Agilent warranty extended to 5 years

Discover Agilent ...

www.agilent.com

www.agilent.com/find/modular

www.agilent.com/find/m9302a

USA: (800) 829-4444



For more information on Agilent Technologies' products, applications, or services, please contact your local Agilent office. The complete list is available at: www.agilent.com/find/contactus

PICMG and the PICMG logo, CompactPCI and the CompactPCI logo, AdvancedTCA and the AdvancedTCA logo are US registered trademarks of the PCI Industrial Computers Manufacturers Group. "PCIe" and "PCI EXPRESS" are registered trademarks and/or service marks of PC-SIG. Microsoft, Windows, Visual Studio, Visual C++, Visual C#, and Visual Basic are either registered trademark or trademarks of Microsoft Corporation in the United States and/or other countries.

Product specifications and descriptions in this document subject to change without notice.

© Agilent Technologies, Inc. 2011 Printed in USA, November 16, 2011
5990-6054EN



Agilent Technologies