History and release notes for the R&S®NRT-Z Directional Power Sensors

Contents

Instrument driver history

History for LabWindows/CVI and VXIplug&play driver for VEE, Visual Basic, Visual C++, Borland C++ etc.		
Revision	Date	Note
1.4.2	06/2008	Modifications: - added NRT-Z14 - added .NET wrappers - added CHM help file - new installer
1.4.1	12/2003	Modifications: For LabWindows/CVI - fixed FP of rsnrtz_init
1.4	08/2002	Modifications: - fixed error checking in functions rsnrtz_configCCDF, configCarrFreq, configAver, configMeas, configMeasWithStat - fixed missing parenthesizes in function readASCII - added function rsnrtz_configMod - added function rsnrtz_configAttn - driver changed to meet latest VXIpnp specifications
1,3	10/1999	Modifications: - fixed range checking in function rsnrtz_configCCDF - removed function rsnrtz_reconfigInterface from export functions - removed unused macros
1.2	05/1999	Modifications: - changed IDN query in Initialize (supports now any response that contains NRT-Z43 or NRT-Z44)
1.1	03/1999	Modifications: - changed valid range for Burst Width/Burst Period - added error code rsnrtz_ERROR_INSTR_ERROR_RANGE

History for LabVIEW		
Revision	Date	Note
1.4	06/2008	Modifications: - added NRT-Z14 - added CHM help file
1.3	05/2002	Modifications: - Added VIs Configure Modulation and Configure Attenuation and Boot - All %f changed to %.;%Le
1.2	10/1999	Modifications: - Minor changes.
1.1	03/1999	Modifications: - VI RSNRTZ Write And Read Response.vi now checks for RANGE error

Getting Started

Interface Configuration of the Sensor

To set up the connection successfully, the interface parameters of the sensor and the computer must correspond with each other. The sensor interface is set as follows:
Parity: none
Data bits: 8
Stop bits: 1
Start bits: 1
Protocol: XON / XOFF
The above settings are fixed except for the baud rate, which can be set to 4800, 9600, 19200 or 38400 baud (factory setting). The procedure for changing the baud rate is described in the manual section 4.1.
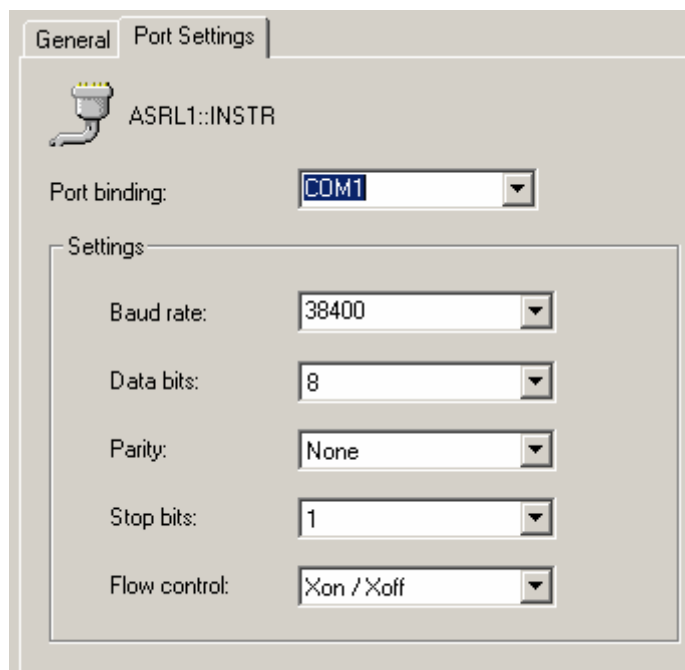
Driver for PC Card Adapter NRT-Z4
Please download the driver from :
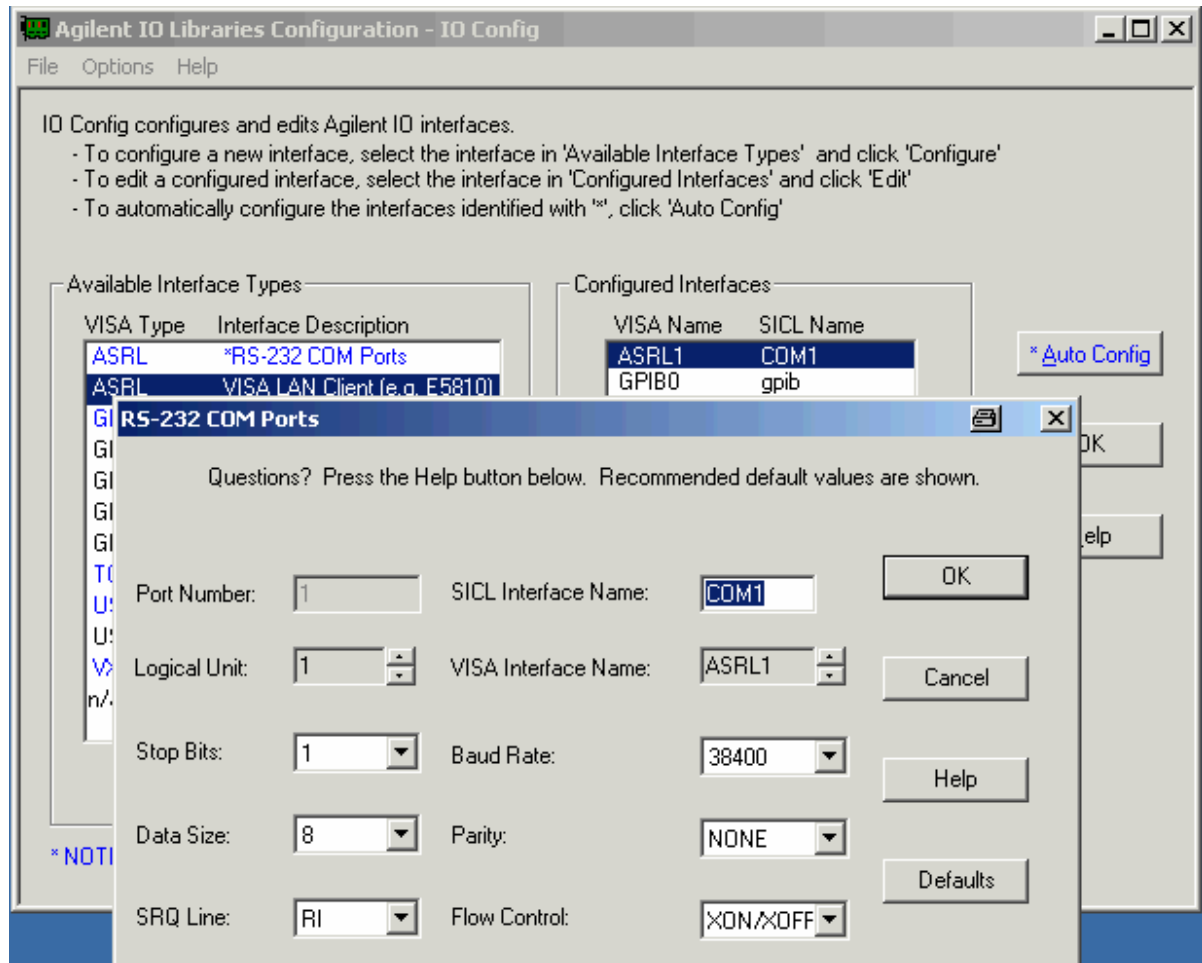http://www.rohde-schwarz.com/www/dev_center.nsf/html/111917down

NI VISA
Use the National Instruments Measurement & Automation Explorer to set the parameters or the viSetAttribute function.

Agilent VISA, IO Library M01.01 or higher required.

Use the IO library to set the parameters or the viSetAttribute function.

LabWindows/CVI

CVI Version

Use National Instruments LabWindows/CVI 6 or later.

Additional Help

The LabWindows/CVI instrument driver consists of a ZIP archive containing the driver sources. In addition, the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources.

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LabVIEW

Getting Started

Unpack content of archive into LabVIEW Instr.lib folder (i.e. \Program Files\LabVIEW 8.0\instr.lib). The driver will then be directly accessible from LabVIEW Instrument Driver function palette menu.
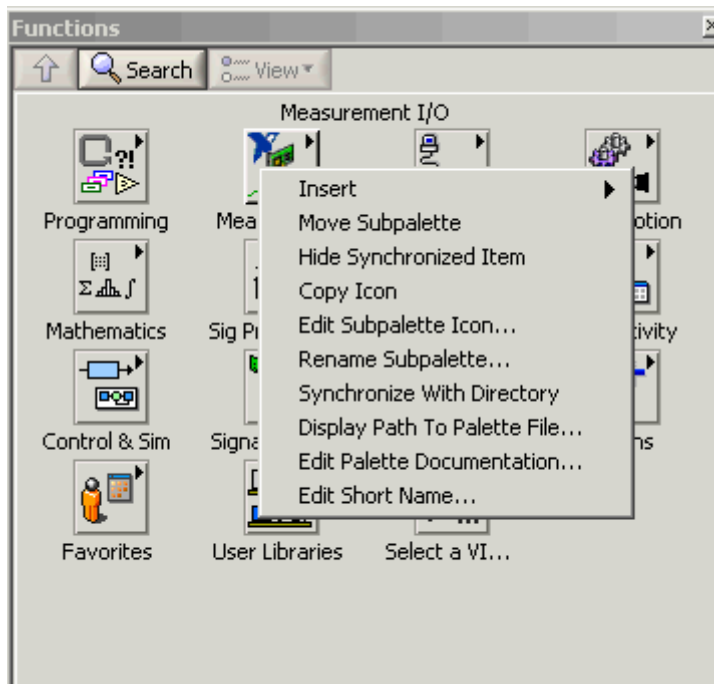
LabVIEW settings

For best results please **turn off 'Synchronize with directory'** feature on Instrument Drivers palette before installing any Rohde & Schwarz LabVIEW driver. If this feature is turned on, it overwrites driver's palette files with its own.

LabVIEW 8 and later

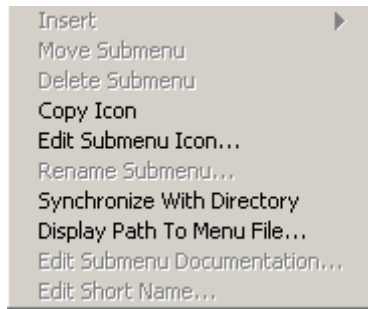Turn off "Synchronize with directory" feature :
Tools => Advanced => Edit palette set. Then find "Instrument I/O" palette, right click on it and clear checkbox besides Synchronize with directory in context menu. Save the changes.

LabVIEW 7

Turn off "Synchronize with directory" feature :
Tools->Advanced->Edit palette views. Then find "Instrument I/O" palette => Instr Drivers right click on it and clear checkbox besides Synchronize with directory in context menu. Save the changes.

Additional Help for LabVIEW drivers

The LabVIEW instrument driver consists of a ZIP archive containing the driver sources (LLB and MNU files). In addition, the instrument driver documentation is included in compressed HTML format (Windows CHM help file) stored together with the LV driver sources.
Each VI's help is linked to the section in the "CHM" file that describes all the features of the VI.

LabVIEW 7.1 driver

Please use the LabVIEW 7 driver.

LabVIEW 8.2 and 8.5 drivers

Please use the LabVIEW 8 driver.

VXIplug&play Instrument Driver for VEE, C++, C#, Visual Basic, Visual Basic .NET etc.

C#
A wrapper is necessary to enable a direct access to the driver DLL.
The rsnrtz.cs wrapper for C# is automatically installed in the ~VXIPnP\WinNt\include directory.

Visual Basic .NET
A wrapper is necessary to enable a direct access to the driver DLL.
The rsnrtz.vb wrapper for .NET is automatically installed in the ~VXIpnp\WinNt\include directory.

VEE Version
Use VEE 6 or later.

LabWindows/CVI
The driver is supplied as both a source code file and as a dynamic link library file (dll). There are several advantages to using the dll form of the driver. These include:

1. Transportability across different computer platforms

2. Faster load time for your project

LabWindows/CVI by default will attempt to load the source version of the instrument driver. To load the dll you must include the file rsnrtz.fp in your project. This file can be found in the vxipnp\winnt\rsnrtz*x* directory. Do not include rsnrtz.c in your project. You must also provide an include path for rsnrtz.h. This is done by adding the directory ~vxipnp\winnt\include to the include paths (CVI Project Option menu) if you have not already done so. The ~ refers to the directory in the VXIPNP variable. By default this is set to C:\.

Additional Help
In addition, the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources in the ~VXIpnp\WinNT\rsnrtz directory.

Additional Information
For more information regarding the VXIPnP instrument drivers, please read the readme.txt file that comes with each driver.