



V3500A Virtual Panel Software Application

----- DISCLAIMER -----

AGILENT PROVIDES THIS FREE SOFTWARE "AS IS". ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF NON-INFRINGEMENT, THE IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, REASONABLE CARE AND SKILL, AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. Agilent shall not be liable in any way whatsoever for any damages of any nature arising from its use. In no event shall Agilent be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to: procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability or tort (including negligence or otherwise) except if caused by willful misconduct or gross negligence arising in any way out of the use of this software, even if advised of the possibility of such damage and if it has been ensured that such data can be reconstructed with reasonable expenditure from data material provided in machine-readable form.

INFORMATION ABOUT THIS EXAMPLE -----

Do's -----

- Reset V3500A
- IDN
- Zeroing without RF power present
- Set average count
- Check average count
- Set Frequency
- Set unit of measurement
- Provide triggered power read data
- Relative Offset
- Pulse Top Power Measurement by mathematical calculation
- Provide the simple way to have instrument remote control

Don'ts -----

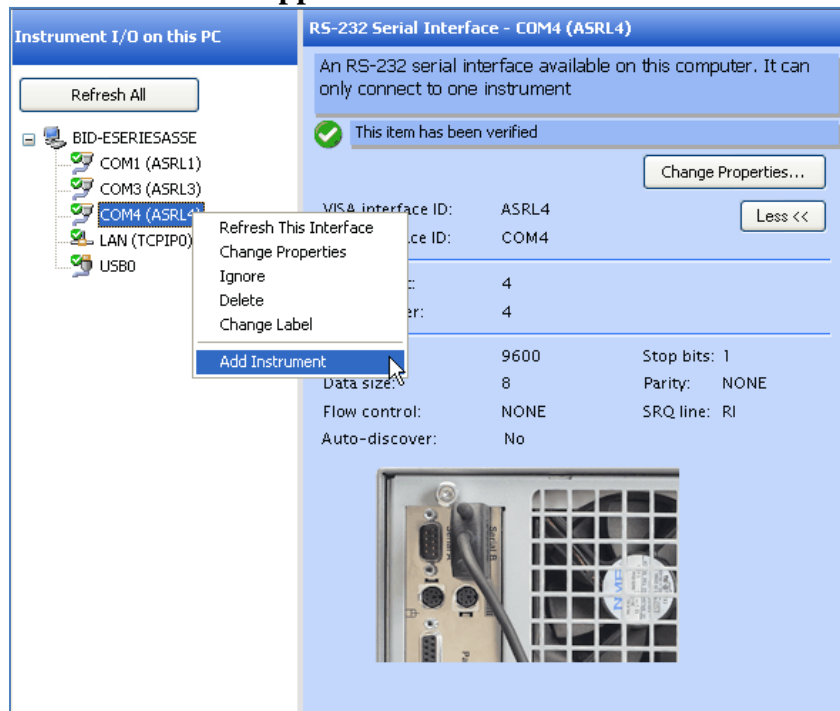
- Virtual panel only operate on C drive



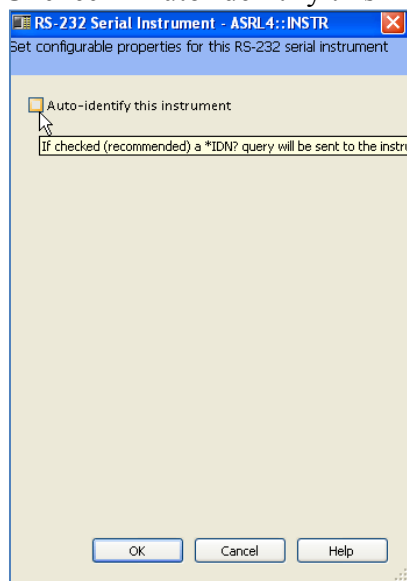
Limitations

1. This utility has been fully tested to be compatible with Windows XP operating system only.
2. This utility only compatible with the following IO software:
 - a. Agilent I/O Libraries (Version 15.1.2008.0 and above)
Example:
15.5.13009(http://www.home.agilent.com/agilent/redirector.jsp?action=ref&lc=eng&cc=US&nfr=-34466.907863.00&ckey=1901732&cname=AGILENT_EDITORIAL)
3. Instrument driver:
 - a. 3500A:
http://www.home.agilent.com/agilent/redirector.jsp?action=ref&cname=AGILENT_EDITORIAL&ckey=1788261&lc=eng&cc=US&nfr=-536902449.928965
 - b. V3500A:
http://www.home.agilent.com/agilent/redirector.jsp?action=ref&cname=AGILENT_EDITORIAL&ckey=1962321&lc=eng&cc=US&nfr=-536902449.928965
4. This utility only works with the following IO hardware:
 - a. COM(USB)
User need to add instrument manually as shown in following figure:

V3500A Virtual Panel Software Application

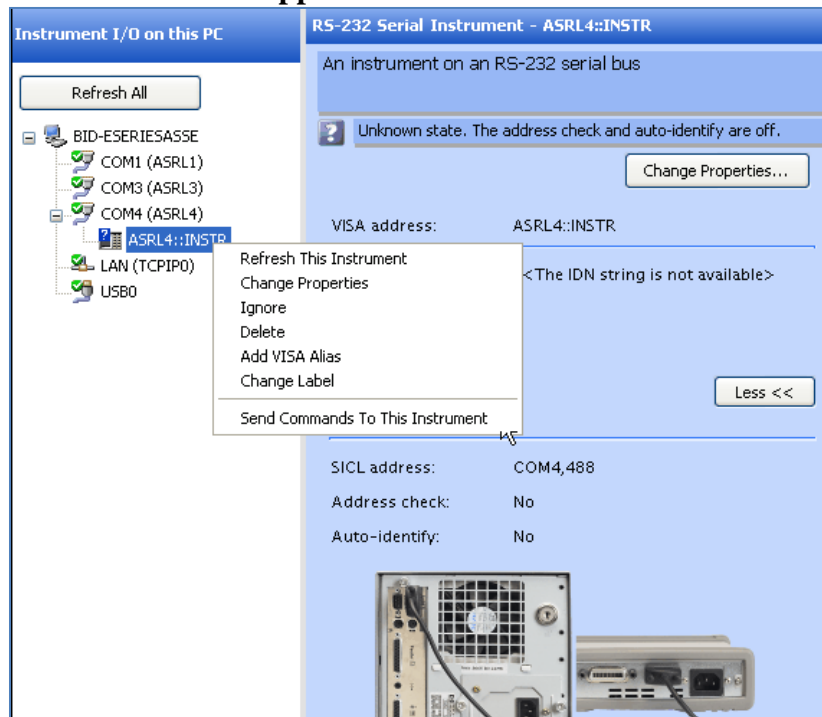


Uncheck “Auto-identify this instrument”

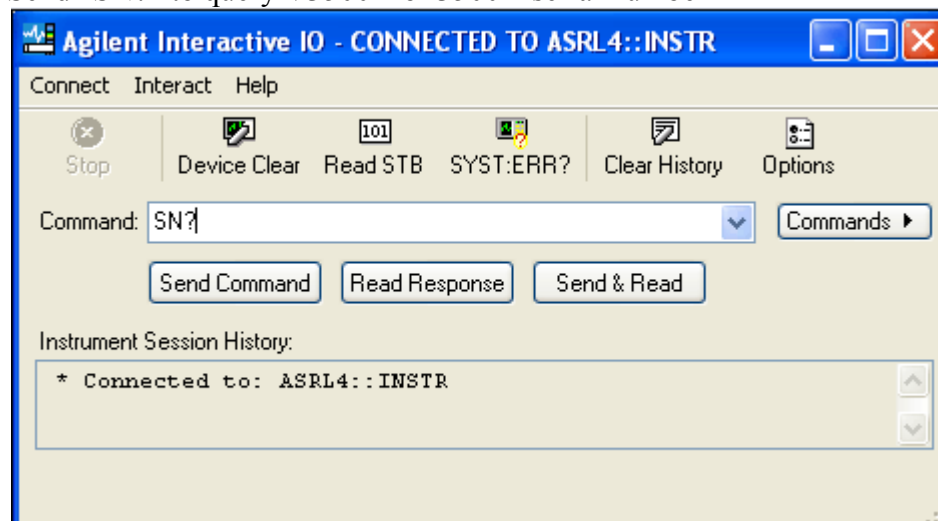


Use “Send Command To This Instrument” to check connection establishment.

V3500A Virtual Panel Software Application

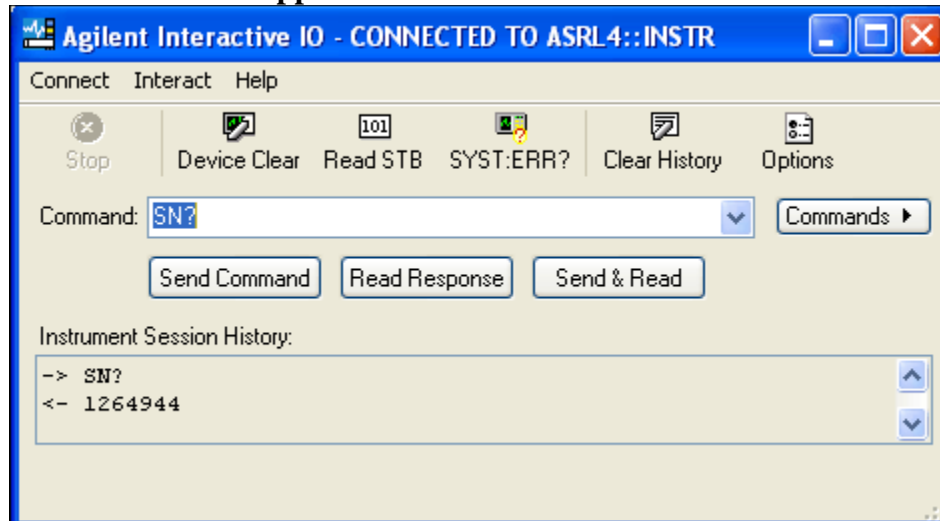


Send “SN?” to query V3500A or 3500A serial number



Successful return V3500A or 3500A serial number

V3500A Virtual Panel Software Application



Running the Program

1. Install Agilent Connection Expert first prior to installing VEE Runtime 9.0(http://www.home.agilent.com/agilent/redirector.jsp?action=ref&cname=AGILENT_EDITORIAL&ckey=1524626&lc=eng&cc=US&nfr=-11143.0.00&pselect=SR.General or http://www.agilent.com/find/vee_download) and above.
2. Agilent VEE Runtime 9.0 and above must be installed before you are able to launch the utility. This VEE Runtime 9.0 program can be downloaded from Agilent.com.
 - (a) Go to: <http://adn.tm.agilent.com>
 - (b) Login (register on ADN website to get the access).
 - (c) Click on "Software Downloads"
 - (d) Click on "Software: Runtime "
 - (e) Click on "VEE Runtime 9.0 Product Download".
 - (f) Click on the "Download" link which is next to "Agilent VEE Runtime 9.0 and above".

Click on "Start" button to execute V3500A Virtual Panel software

V3500A Virtual Panel Software Application



Readme file:

V3500A Readme

V3500A - Virtual Panel & Datalogging

Version: 1.0
Written by: PeikChong

It performing following tasks:

- Reset V3500A
- IDN
- Zeroing
- Set average count
- Check average count
- Set Frequency
- Set unit of measurement
- Provide triggered power read data
- Relative Offset
- Pulse Top Power Measurement

Note:

1. Install 3500A Driver :
http://www.home.agilent.com/agilent/redirector.jspx?action=ref&cname=AGILENT_EDITORIAL&ckey=1788261&lc=eng&cc=US&nfr=-536902449_928965
- Or V3500A Driver:
http://www.home.agilent.com/agilent/redirector.jspx?action=ref&cname=AGILENT_EDITORIAL&ckey=1962321&lc=eng&cc=US&nfr=-536902449_928965
2. Set the correct COM VISA address
3. Timeout value should not be less than 20 s even though the average count was set to 1
4. The error message will be displayed if the COM VISA address or timeout value being entered is incorrect.

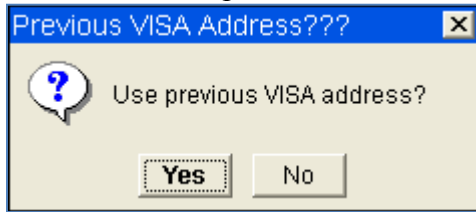
AGILENT PROVIDES THIS FREE SOFTWARE "AS IS". ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF NON-INFRINGEMENT, THE IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, REASONABLE CARE AND SKILL, AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. Agilent shall not be liable in any way whatsoever for any damages of any nature arising from its use. In no event shall Agilent be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of

Close

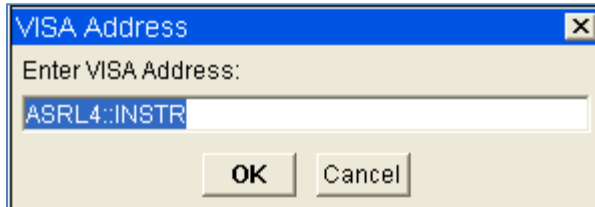


V3500A Virtual Panel Software Application

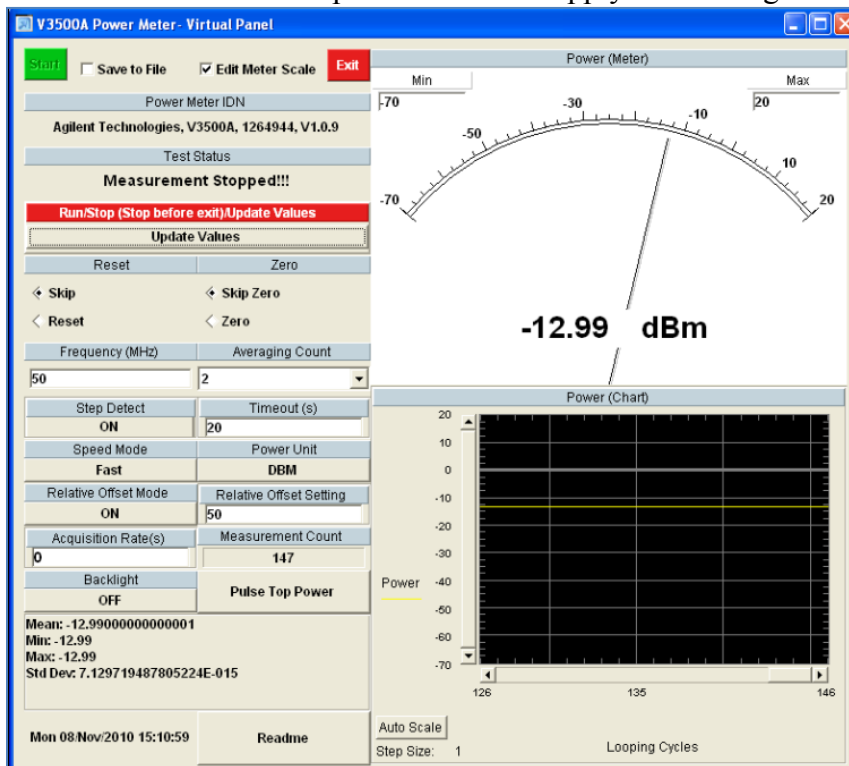
Select “No” to input new Visa address



Enter correct Visa address which is similar to Agilent IO Library (Visa Address)



Remember to click on “Update Values” to apply new setting on the software



Click on **Pulse Top Power** to start pulse top power measurement.

V3500A Virtual Panel Software Application

Input correct pulse width & pulse period prior to start pulse top power measurement.

Pulse Top Power (Mathematically Calculation Method)

Start	Pulse Width	Pulse Period	Pulse Top Power	Close
	5u	10u		

☒ Save to File

Note

Pulse Top Power(PT) = Average Power(PA) / Duty Cycle(DC)
Wehere:
Duty Cycle = Pulse Width / Pulse Period
Note:
Pulse Top Power is mathematically calculation method

Virtual panel will display “mean, min, max & standard deviation” when it in “Update Values” or “Run” mode.

Mean: -12.98999999999989
Min: -12.99
Max: -12.99
Std Dev: 1.156313857565968E-013

User may select “Yes” to snapshot the panel before exits the panel.

Save Screenshot [X]

? Would you like to save the screen?

Yes **No**

Enter correct path & filename to save the screenshot

File Location & Name [X]

Enter File Location & Name (include extension of either .jpg or .bmp):

c:\Power Meter ScreenShot.jpg

OK **Cancel**



Agilent Technologies

V3500A Virtual Panel Software Application

V3500A Handheld Power Meter Reference:

Datasheet:

http://www.home.agilent.com/agilent/redirector.jsp?action=obs&nid=-536902449.3.00&lc=eng&cc=CA&ckey=1871286&pubno=5990-5483EN<ype=LitStation&ctype=AGILENT_EDITORIAL

User's Guide:

http://www.home.agilent.com/agilent/redirector.jsp?action=ref&cname=AGILENT_EDITORIAL&cc=MY&lc=eng&ckey=1752228&nid=-536902449.928965&pid=1806420

Service Guide:

<http://cp.literature.agilent.com/litweb/pdf/V3500-90006.pdf>

Demo Guide:

http://www.home.agilent.com/agilent/redirector.jsp?action=ref&cname=AGILENT_EDITORIAL&cc=MY&lc=eng&ckey=1869978&nid=-536902449.928965.08&pid=1806420

Quick Fact Sheet:

<http://cp.literature.agilent.com/litweb/pdf/5990-5502EN.pdf>