

R&S®NRQ6

Release Notes

Firmware Version 02.20.20072802

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1421.3550.00 | Version 15.00 | R&S®NRQ6

The software makes use of several valuable open source software packages. For information, see the "Open Source Acknowledgment" provided with the product.

The following abbreviations are used throughout this document: R&S® NRQ6 is abbreviated as R&S NRQ6

PAD-T-M: 3574-3288-02/03.00/C/1/1/EN

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1 Information on the Current Version and History

1.1 Version 02.20.20072802

Firmware package contents

Contents	Item No.
Operating Software for the Rohde&Schwarz Power Sensor NRQ6	-

New Functionality

Contents	Item No.
-	-

Improvements

Contents	Item No.
Maximal length of trace points in trace mode increased from 2^{13} (= 8192) to 2^{20} (= 1048576)	645580
Sensor autotest failure in trace mode at high frequency unmodulated RF signal is fixed	624064
In continuous average mode, a non-static error is raised, when using long aperture times together with large resolution bandwidth. Measurement will not complete in this situation.	330413
Static errors are raised in different not-allowed configuration scenarios.	684693 713175 547433 648023
Sensor web client trigger level value displayed in wrong format.	710362
DC Zeroing feature improved, to measure and save the DC offset value within a predefined range of measurement configurations.	648030

Important Notes

Contents	Item No.
-	-

Known Issues

Contents	Item No.
INPut:ATTenuator:AUTO ONCE sometimes turns on the attenuator even with signals below threshold.	438488
When measuring with INIT:CONT ON while using an external reference clock, a loss of clock might not be signaled immediately. Measurement results may be wrong.	228240 435090

Contents	Item No.
Autotrigger function (an automatic sensor trigger after a certain time without trigger event) does not work reliably and if occurred, it is not correctly queryable using TRIGger:ATrigger:EXECuted?	432352 427832 416344
When connected to NRX and using fast aperture times, trigger modes BUS and EXT may not provide a measurement result.	525745 494049
In some rare conditions when performing fast measurement cycles together with the automatic attenuator feature instead of reading results the sensor responds with a "Data corrupt or stale;fetch?" error.	432318 425208 419605
PoE PowerCycle issue in case of USB cable connected	238626
In I/Q Trace Mode, negative trigger delay is cursed internally to 0s	641277

1.2 Version 02.10.19092501

Firmware package contents

Contents	Item No.
Operating Software for the Rohde&Schwarz Power Sensor NRQ6	-

New Functionality

Contents	Item No.
Power Servoing (R&S NRQ6-K2 Option)	574420
IQ.Tar Format for Trace I/Q data download (VSE Support)	851650
SCPI requests for channel spacing in ACLR mode	358460
Sensor Sanitizing	375712

Improvements

Contents	Item No.
Hardware PeackDetector to be used for auto attenuation switch	228681
Sensor Sanitizing possible in Fail-Safe Mode	621459
Sensor Level-Offset in SignalCheck measurement corrected	622044
Automatic attenuator switches may leave static error messages "overload" in the SYSTem:SERRor? query.	420722
When using external LO and either changing this signal or change of ambient temperature, the SCPI command „SENSe:FREQuency:CONVersion:MIXer:LO:SOURce EXT" must be issued in order to initiate the internal LO leveling procedure.	239946 227155

Important Notes

Contents	Item No.
-	-

Known Issues

Contents	Item No.
Sensor autosest failure in trace mode with high frequency unmodulated RF signal	624064
INPut:ATTenuator:AUTO ONCE sometimes turns on the attenuator even with signals below threshold.	438488
When measuring with INIT:CONT ON while using an external reference clock, a loss of clock might not be signaled immediately. Measurement results may be wrong.	228240 435090
Autotrigger function (an automatic sensor trigger after a certain time without trigger event) does not work reliably and if occurred, it is not correctly queryable using TRIGger:ATRigger:EXECuted?	432352 427832 416344
When connected to NRX and using fast aperture times, trigger modes BUS and EXT may not provide a measurement result.	525745 494049
In some rare conditions when performing fast measurement cycles together with the automatic attenuator feature instead of reading results the sensor responds with a "Data corrupt or stale;fetch?" error.	432318 425208 419605
In CONT:AVG measurement mode, a non-static error is raised when using long aperture times together with large resolution bandwidth. Measurement will not complete in this situation.	330413
PoE PowerCycle issue in case of USB cable connected	238626

1.3 Version 02.00.19011101

Firmware package contents

Contents	Item No.
Operating Software for the Rohde&Schwarz Power Sensor NRQ6	-

New Functionality

Contents	Item No.
Support of phase coherent measurements option (R&S NRQ6-K3)	484600 433433
Web GUI supports capture and export I/Q sample values in a CSV file	462244
Notch filter for DC offset component for bandwidths larger than 40MHz (Zero-IF operating mode) command: SENSE:FILTER:DCReject	402596
Added IQ offset zero calibration for bandwidths larger than 40MHz (Zero-IF operating mode) command: CALibration:IQOffset:AUTO	519071

Improvements

Contents	Item No.
Buffered continuous average measurement with external trigger at high trigger rate improved	503742
General speed up of settings	515986

Important Notes

Contents	Item No.
-	-

Known Issues

Contents	Item No.
When connected to NRX and using fast aperture times, trigger modes BUS and EXT may not provide a measurement result.	525745
INPut:ATTenuator:AUTO ONCE sometimes turns on the attenuator even with signals below threshold.	438488
Automatic attenuator switches may leave static error messages "overload" in the SYSTem:SERRor? query.	420722
When measuring with INIT:CONT ON while using an external reference clock, a loss of clock might not be signaled immediately. Measurement results may be wrong.	228240 435090
Autotrigger function (an automatic sensor trigger after a certain time without trigger event) does not work reliably and if occurred, it is not correctly queryable using TRIGger:ATRigger:EXECuted?	432352 427832 416344
In some rare conditions when performing fast measurement cycles together with the automatic attenuator feature instead of reading results the sensor responds with a "Data corrupt or stale;fetch?" error.	432318 425208 419605

Contents	Item No.
In CONT:AVG measurement mode, a non-static error is raised when using long aperture times together with large resolution bandwidth. Measurement will not complete in this situation.	330413
When using external LO and either changing this signal or change of ambient temperature, the SCPI command „SENSe:FREQuency:CONVersion:MIXer:LO:SOURce EXT“ must be issued in order to initiate the internal LO leveling procedure.	239946 227155

1.4 Version 01.20.18072501

Firmware package contents

Contents	Item No.
Operating Software for the Rohde&Schwarz Power Sensor NRQ6	-

New Functionality

Contents	Item No.
-	-

Improvements

Contents	Item No.
Automatic attenuator switches may leave static error messages "overload" in the SYSTem:SERRor? query.	420722
6 GHz Signal not recognized by Autoset	416329

Important Notes

Contents	Item No.
-	-

Known Issues

Contents	Item No.
see Version 1.10-18.05.03.04	-

1.5 Version 1.11-18.06.06.01

Firmware package contents

Contents	Item No.
Operating Software for the Rohde&Schwarz Power Sensor NRQ6	-

New Functionality

Contents	Item No.
-	-

Improvements

Contents	Item No.
"Don't miss a pulse" feature tested up to 2us pulse period signal with internal trigger	418049

Important Notes

Contents	Item No.
-	-

Known Issues

Contents	Item No.
see Version 1.10-18.05.03.04	-

1.6 Version 1.10-18.05.03.04

Firmware package contents

Contents	Item No.
Operating Software for the Rohde&Schwarz Power Sensor NRQ6	-

New Functionality

Contents	Item No.
Initial version for product launch	-

Improvements

Contents	Item No.
"Don't miss a pulse" feature tested up to 2us pulse period signal with internal trigger	418049
Increase data throughput for IQ trace data	426465
*OPC? query does not work after INIT:IMMEDIATE	304175
Improved reaction time of automatic attenuator	429674

Important Notes

Contents	Item No.
Some SCPI commands renamed with respect to previous firmware versions.	407462
When using SENSE:ROSCillator:... commands, a timeout of about 5sec is recommended	402315

Known Issues

Contents	Item No.
INPut:ATTenuator:AUTO ONCE sometimes turns on the attenuator even with signals below threshold.	438488
Automatic attenuator switches may leave static error messages "overload" in the SYSTem:SERRor? query.	420722
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When using external LO and either changing this signal or change of ambient temperature, the SCPI command „SENSE:FREQuency:CONVersion:MIXer:LO:SOURce EXT" must be issued in order to initiate the internal LO leveling procedure.	239946 227155

2 Modifications to the Documentation

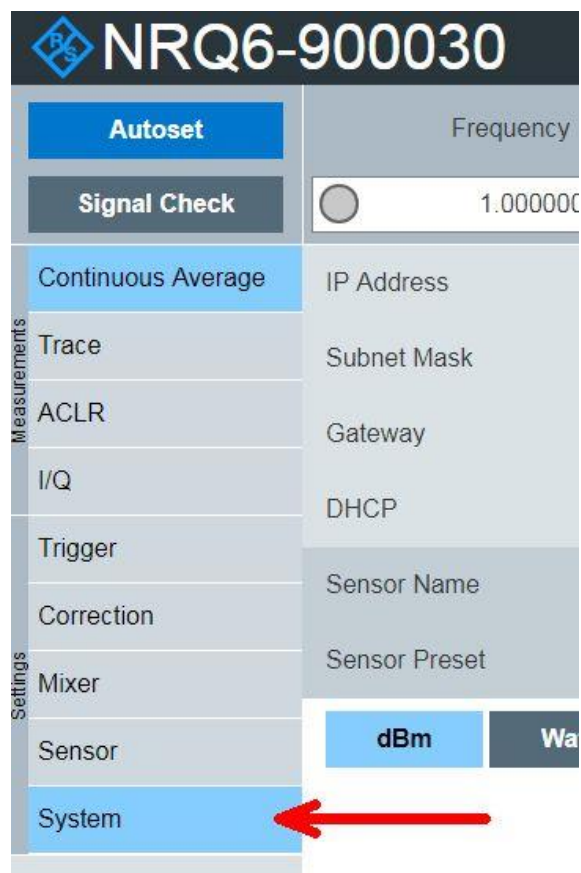
The current documentation is up-to-date.

3 Firmware Update

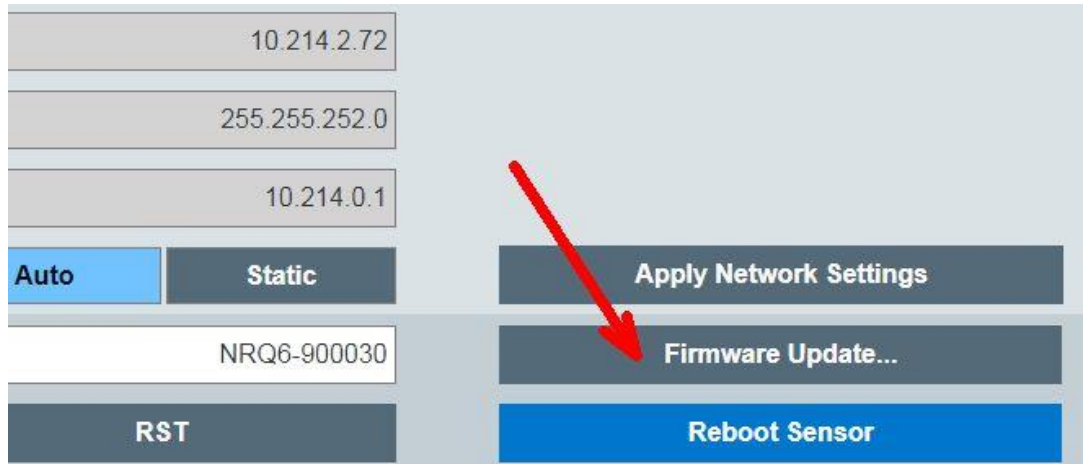
3.1 Updating the Firmware

The NRQ6 WebGUI permits an easy way to update the operating firmware of the power sensor. New firmware is generally provided as *.rsu (Rohde & Schwarz Update) files.

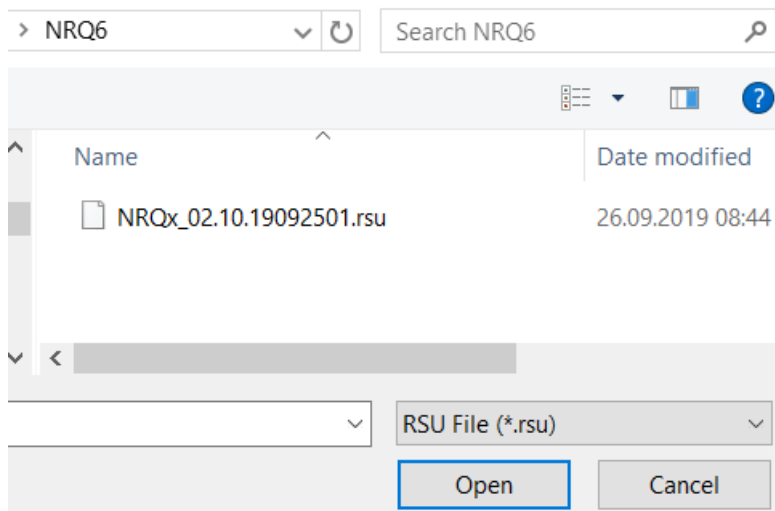
In order to start a firmware update, click on the **System** menu



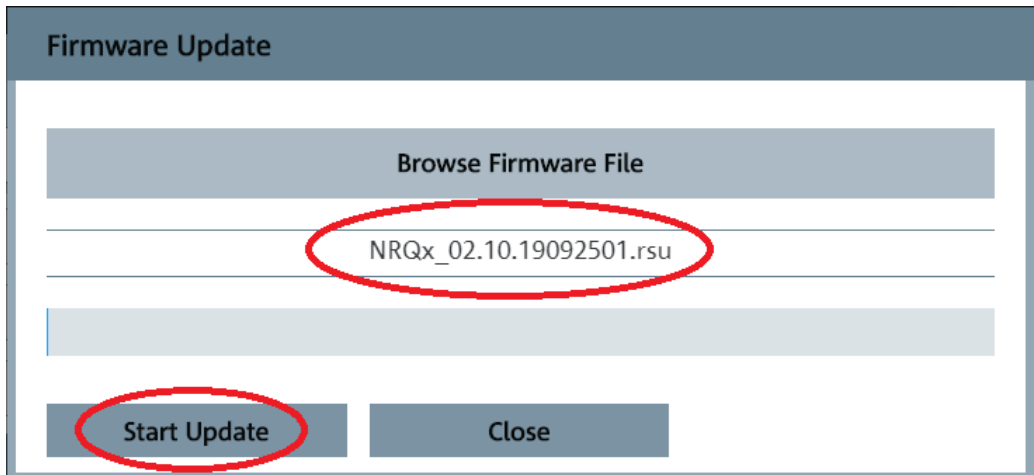
On the System page select **Firmware Update...**



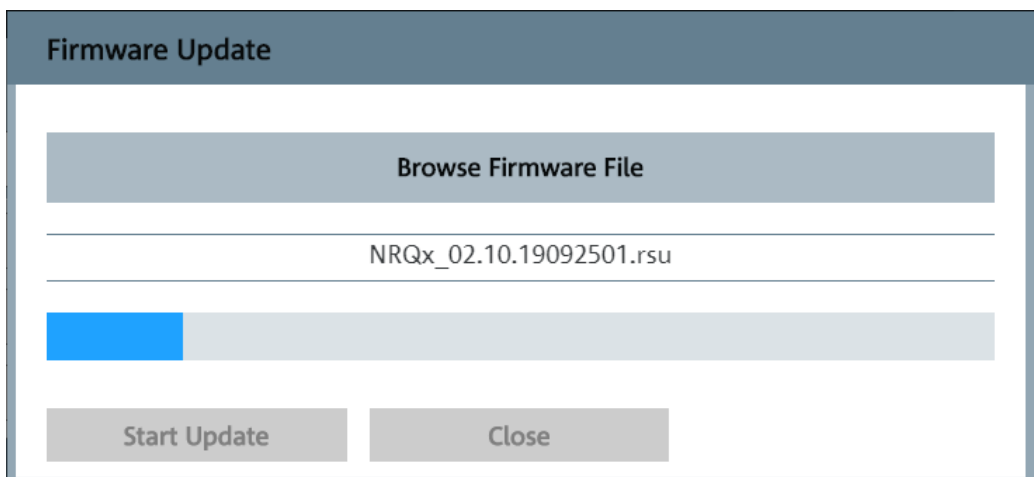
This opens the Firmware Update page. From there you can browse the filesystem for an appropriate *.rsu file.



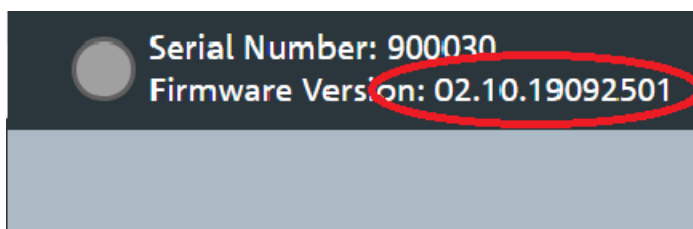
After selecting the update file, you can click on **Start Upload**



The selected firmware files is loaded into the power sensor and finally flashed into the internal memory.



After the programming has finished the WebGUI page is reloaded and you can check that the sensor now carries the version which has been selected for the update.



4 Customer Support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz equipment, contact one of our Customer Support Centers. A team of highly qualified engineers provides telephone support and will work with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz equipment.

Up-to-date information and upgrades

To keep your instrument up-to-date and to be informed about new application notes related to your instrument, please send an e-mail to the Customer Support Center stating your instrument and your wish. We will take care that you will get the right information.

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