

# R&S®NRX Power Meter

## Release Notes

### Firmware Version 02.32.20062902

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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®

[R&S NRX Power Meter Information on the Current Version and History](#)

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

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# 1 Information on the Current Version and History

## 1.1 Version 02.32.20062902

### New Functionality

Functions
n.a.

### Modified Functionality

Functions
n.a.

### Improvements

Improvements
Remote control: INIT:CONT? query returns "1" only if a continuous measurement is active
Security: Disabling "SCPI over LAN" disables all supported protocols (VXI-11, HiSLIP, Socket)
NRT measurement: improved trigger event handling when TRIGger:SOURce is set to EXTERNAL

### Known Issues

Known-Issues
Favorite button is without function
Emulation: other emulations not implemented yet (NRVD, HP, Agilent)
Support for network sensors: requires sensor firmware version 02.00 or better
Statistics: wrong results when scaling power axis below 0.1 dB/div
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX
Remote control: changing network configuration via GPIB may block SCPI communication – please configure network settings in GUI

## 1.2 Version 02.31.20040101

### New Functionality

Functions
n.a.

**Modified Functionality**

Functions
n.a.

**Improvements**

Improvements
Support for R&S Recal+
Pulse Analysis: Bugfix display of reference levels related to voltage/power
Trigger: Bugfix behavior of *TRG and TRIG:IMM
NRP2 remote emulation: TRIG:MODE is set to NORMal after L/R transition or reset

**Known Issues**

Known-Issues
Favorite button is without function
Emulation: other emulations not implemented yet (NRVD, HP, Agilent)
Support for network sensors: requires sensor firmware version 02.00 or better
Statistics: wrong results when scaling power axis below 0.1 dB/div
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

**1.3 Version 02.30.19101601****New Functionality**

Functions
Support for R&S Recal+
Buffered Mode for Continuous Average Measurement
Predefined settings for common standards
Sanitization/Declassification
Download of user manual to USB stick
Added SENSE commands: SENSe[:POWer]:BURSt:LENGth? SENSe[:POWer][:AVG]:FAST

**Modified Functionality**

Functions
Sensor power parameter: default unit depends on SENSE:UNIT:POWer parameter setting SENSe:POWer:REFerence SENSe:POWer:CCDF:REFerence SENSe:TRACe:MEASurement:POWer:*
Source power parameter: default unit depends on SOURCE:POWer:UNIT parameter setting SOURCE:POWer
SYSTem:PRESet is different from *RST:

### Functions

INIT:CONT ON  
 CALCulate:AVERage:TCONtrol MOVing  
 CALCulate:TRACe:AVERage:TCONtrol MOVing  
 SENSE:AVERage:TCONtrol MOVing  
 SENSE:TRACe:AVERage:TCONtrol MOVing

### Improvements

#### Improvements

Network sensor assignment is persistent.  
 Timeslot/Timegate: analog output can be assigned to any slot/gate.  
 Analog output can handle calculated measurement results from two sensors.  
 Remote control: SENSE:POWer:RANGe commands (NRT bargraph) work as expected.  
 NRP2-Emulation: Bugfixes  
 Fixed "TCP SACK Panic" (CVE-2019-11477, CVE-2019-11478, CVE-2019-11479)

### Known Issues

#### Known-Issues

Favorite button is without function  
 Emulation: other emulations not implemented yet (NRVD, HP, Agilent)  
 Support for network sensors: requires sensor firmware version 02.00 or better  
 Statistics: wrong results when scaling power axis below 0.1 dB/div  
 Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

## 1.4 Version 02.20.19042601

### New Functionality

#### Functions

n.a.

### Modified Functionality

#### Functions

Power parameter: default unit depends on UNIT:POWer parameter setting  
 CALCulate:LIMit:LOWer:POWer  
 CALCulate:LIMit:UPPer:POWer  
 CALCulate:METer:LOWer:POWer  
 CALCulate:METer:UPPer:POWer  
 CALCulate:NRT:CCDF:THReshold  
 CALCulate:RELative:POWer  
 CALCulate:TRACe:MEASurement:POWer:\*  
 OUTPut:RECOOrder:LIMit:LOWer:POWer

### Functions

OUTPut:RECOder:LIMit:UPPer:POWer
SENSe:POWer:REFerence
SENSe:POWer:CCDF:REFerence
SENSe:TRACe:MEASurement:POWer:*
SOURce:POWer
TRIGger:LEVel
TRIGger:ALL:LEVel
Ratio parameter: default unit depends on UNIT:POWer:RATio parameter setting
CALCulate:LIMit:LOWer:RATio
CALCulate:LIMit:UPPer:RATio
CALCulate:METer:LOWer:RATio
CALCulate:METer:UPPer:RATio
CALCulate:RELative:RATio
OUTPut:RECOder:LIMit:LOWer:RATio
OUTPut:RECOder:LIMit:UPPer:RATio

### Improvements

#### Improvements

Emulation: complete NRP2 emulation
Support for network sensors: if sensor is not compatible to NRX then an error message is shown - when sensor is removed the error message is still displayed, but can be deleted manually
Trace: horizontal auto scale (only when using NRQ)
Trace: marker results are now displayed in result panel
Timeslot/Timegate: results are now displayed in result panel in graphical view
Remote control: calculated results from two sensors (i.e. DIFF, SUM, ...) can be fetched
Remote control: STAT:QUES completely implemented
Show EULA for used fonts

### Known Issues

#### Known-Issues

Favorite button is without function
Emulation: other emulations not implemented yet (NRP, NRVD, HP, Agilent)
Network sensor assignment is not saved - assignment must be repeated after reboot.
Support for network sensors: requires sensor firmware version 02.00 or better
No predefined settings for common standards
Timeslot/Timegate: analog output does only handle the first slot/gate
Statistics: wrong results when scaling power axis below 0.1 dB/div
Analog output does handle only single measurement results from a single sensor
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX
Remote control: SENSe:POWer:RANGe commands (NRT bargraph) without function

## 1.5 Version 02.10.18121802

### New Functionality

Functions
NRP2 emulation
Support for network sensors (NRPxxYN and NRQ)

### Modified Functionality

Functions
n.a.

### Improvements

Improvements
Offset: GUI offset value is always the effective offset (offset value + frequency dependent offset)
Trigger level: limits are updated when offset is to be configured
Trace: fixed wrong behavior in trigger mode "Normal" after reconnecting sensor
Filter: video bandwidth can be configured for NRP sensors
Security settings: webserver / VNC can be disabled
Security settings: request for reboot is shown when switching volatile mode
Remote control: fixed sporadic deadlocks after remote-local transition / reset
Remote control: SCPI errors shown in notification center can be removed

### Known Issues

Known-Issues
Favorite button is without function
Emulation: NRP2 emulation only (most SENSE and CALCulate parameters are implemented, some DISPLAY, MEMORY and OUTPUT parameters not implemented yet)
Emulation: other emulations not implemented yet (NRP, NRVD, HP, Agilent)
Network sensor assignment is not saved - assignment must be repeated after reboot.
Support for network sensors: requires sensor firmware version 02.00 or better
Support for network sensors: if sensor is not compatible to NRX then an error message is shown - when sensor is removed the error message is still displayed until reboot of NRX
No predefined settings for common standards
Trace: horizontal auto scale not implemented yet
Trace: marker results are not shown in result panel
Timeslot/Timegate: results are not shown in result panel in graphical view
Timeslot/Timegate: analog output does only handle the first slot/gate
Statistics: wrong results when scaling power axis below 0.1 dB/div
Analog output does handle only single measurement results from a single sensor
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX
Remote control: calculated results from two sensors (i.e. DIFF, SUM, ...) cannot be fetched
Remote control: STAT:QUES not implemented yet
Remote control: SENSE:POWER:RANGE commands (NRT bargraph) without function

**Known-Issues**

EULA for used fonts is missing

**1.6 Version 02.00.18101801****New Functionality****Functions**

First release

**Modified Functionality****Functions**

n.a.

**Improvements****Improvements**

n.a.

**Known Issues****Known-Issues**

Favorite button is without function

No remote emulations

No predefined settings for common standards

LAN sensors cannot be configured

Security settings: Webserver / VNC cannot be disabled

Trace: horizontal auto scale not implemented yet

Trace: marker results are not shown in result panel

Timeslot/Timegate: results are not shown in result panel in graphical view

Timeslot/Timegate: analog output does only handle the first slot/gate

Analog output does handle only single measurement results from a single sensor

Remote control: calculated results from two sensors (i.e. DIFF, SUM, ...) cannot be fetched

Remote control: STAT:QUES not implemented yet

Remote control: SENSE:POWer:RANGe commands (NRT bargraph) without function

Trigger level: Limits are not updated when offset is to be configured

EULA for used fonts is missing



## 2 Modifications to the Documentation

The current documentation is up-to-date.

## 3 Firmware Update

### 3.1 Update Information

Please refer to the document "R&S®NRX Power Meter User Manual" (<https://www.rohde-schwarz.com/manual/nrx/>).

## 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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