R&S®SFI100A
Release Notes 5.30.132.61

Firmware Version 5.30.132.61

ROHDE&SCHWARZ
Make ideas real

Contents

1 Information on the current version and history

To ensure the R&S SFI100A remains highly secure when being updated, only signed updates will be released.

This will make it possible to detect all future unsigned or manipulated updates.

The instrument's behavior can also be configured via "Setup>Security>Security>General>Secure Update Policy".

These settings are password protected.

For more information, see the R&S SFI100A User Manual.

1.1 Version 5.30.132.61

Released May 2024

Firmware package contents

New Functionality
SFI-B1016 IF FREQUENCY 16 GHZ
SFI-KH1016 HW KEY FOR SFI-B1016
SFI-K0 DEMO LICENSE (BASIS 18M)
SFI-K17 ANALOG I/Q OUTPUTS
SFI-K261 MCCW (WINIQSIM2)
SFI-K414 OFDM (WINIQSIM2)
SFI-K441 IEEE 802.11ad (WinIQSIM2)
SFI-K444 5G NR R15 (WINIQSIM2)
SFI-K448 5G NR R16 (WINIQSIM2)
SFI-K471 5G NR R17 (WINIQSIM2)
SFI-K477 IEEE 802.11ay (WinIQSIM2)
SFI-K499 CDM (WINIQSIM2)
SFI-K510 BASEBAND GENERATOR W/ ARB

SFI-K517 ARB MEMORY EXT TO 8 GS

SFI-K529 BASEBAND EXT. TO 8 GHZ BW

SFI-K530 BASEBAND EXT. TO 10 GHZ BW

SFI-K544 USER-DEFINED FRC

SFI-K548 CREST FACTOR REDUCTION

SFI-K553 EXTERNAL FRONTEND CONTROL

SFI-K703 100MHZ, 1GHZ REF IN/OUT

SFI-K704 FLEXIBLE REFERENCE INPUT

SFI-K708 8 GHZ REFERENCE IN/OUT

ACASFI100A ACCREDITED CALIBRATION

Fixed Issues

Known Issues

2 Modifications to the documentation

The current documentation is up-to-date.

3 Firmware update

3.1 Validity information

Device	Order Number
R&S® SFI100A Vector Signal Generator	1444.4000K02

3.2 Downgrade

Generally it is not recommended to use an earlier version than the latest version available. In some cases the older versions do not support the hardware used in your instrument. Before installing this firmware, check if this could happen:

► Start System Config / Setup / Instrument Assembly / Version/Options
► In the tab "Firmware", you find the Downgrade Info.
► If the version to be installed is greater or equal than the "Min. Version", the hardware will be supported after downgrading. (However, this cannot be guaranteed for all software options)
► If the version to be installed is lesser than the "Min. Version", not all of the modules will be supported. **Your instrument will not work after downgrading!**
► Downgrading may fail using standard rsu-Files (eg. due to changes in the instrument configuration file). In this case, press PRESET-Button during power-on or install ISO image available from service department. Update information

3.3 Updating Information

The update procedure requires that the instrument is operational. There is no need to uninstall the current firmware. Instrument settings are preserved during the update, including user data and network settings.

To perform this procedure, USB Storage must be enabled in security settings. Press the SETUP key, select Security and check USB Storage setting

3.4 Updating the Firmware

Required Equipment

Software: Firmware update file SFI100A_5.30.132.61.rsu

Hardware: USB memory stick with enough free space to save the update file (about 700 MByte).

The memory stick does not need to be bootable and previous data on the stick is not affected. Several update files may reside on the stick in parallel. During update procedure the stick is not modified by the instrument.

Prepare Memory Stick

● Download update file to a PC
● Connect USB stick to PC and copy the update file to the root directory
● Wait until copy procedure has finished and remove USB stick

Install new firmware on R&S®SFI100A:

● Connect USB stick to instrument
● Switch on instrument, if instrument is powered off
● Wait a few seconds until "Process Software Update?" message box appears. Confirm by touching the YES Button or pressing the rotary knob.
● Select firmware version using the arrow keys and press knob to start update
● Wait until "Software update successful" message box appears. This may take several minutes
● Remove USB stick and touch the Reboot button
● The instrument now reboots.

Execute internal adjustments (only if indicated)

Internal adjustments can be initiated manually (e.g. after warming up) by performing the followings steps:

● Press [PRESET] on the instrument front panel.

● Press [SETUP], select "Internal Adjustments…" and execute "Adjust All". This procedure updates all internal instrument adjustments and will take several minutes.

NOTICE

Risk of DUT damage

During internal adjustments, the instrument temporarily applies high power at the RF output, High power at the RF output may destroy a connected DUT (device under test).

Adjustments requiring external measurement equipment are not affected by the firmware update and need not to be performed.

3.5 Alternative update procedures

The USB firmware update is recommended for most situations. However, alternative methods for updating the firmware are available:

3.5.1 Firmware update over LAN

Instrument settings are preserved during the update, including user data and network settings.

- Get access to the file system of the instrument using ftp (other methods like samba share is also supported, see application note 1GP72 for details).
  Enter   ftp://<ip address or host name> in the file manager
- Copy **SFI100A_5.30.132.61.rsu** to directory update
- The update procedure starts immediately
- Execute internal adjustments, if indicated

3.5.2 Firmware update using ISO image

> **NOTICE**
>
> ## Potential loss of data!
>
> User data and user specific instrument settings will be lost during this procedure. Instrument serial number, software license keys and all adjustments requiring external measuring equipment are not affected.

3.5.2.1 Required equipment

Software:

- ISO image for firmware update **SFI100A_5.30.132.61.rsu**
  Please contact the service department to get this file!

Hardware:

- **External** USB CD or DVD ROM burner with USB cable.
- 1 CD Recordable.
- PC with burn program that can burn ISO images onto CD.

About ISO image

This is a standardized file format for creating CD images. A CD image is a single file encapsulating the whole data of a CD including directories and files. Unpacking the image to a CD restores the original data. Almost any CD burning program is able to write CDs based on ISO images.

3.5.2.2   Update procedure

Burn ISO image onto a CD

On most computers, burning an ISO image can be initiated by simply double clicking the ISO image file. If this is not the case, the manual procedure is similar to the following instructions. Nero Burning ROM (StartSmart) is used in this example.

● Connect the external USB CD/DVD drive to the PC
● Insert a recordable CD
● Start Nero StartSmart
● Select medium „CD"
● Select „Create Data CD"
● From the **Files menu**, open file **SFI100A_5.30.132.61.iso**
● Click "Burn"
● When finished, close Nero and disconnect external USB CD/DVD drive

Install new firmware on R&S®SFI100A

● Instrument must be switched off
● Connect the external USB CD/DVD drive to the R&S®SFI100A
● Switch on Instrument
● The instrument boots from external drive
● Follow the instructions on screen
● Disconnect the external USB device
● Reboot instrument
● Execute internal adjustments, if indicated

NOTICE

If the CD refuses to boot please ensure that you have burned the ISO-image as an "image" and not as a single file. Check the CD regarding presence of several files.

---

4 Customer support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz product, contact our customer support center. A team of highly qualified engineers provides support and works with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz products.

Contact information

Contact our customer support center at www.rohde-schwarz.com/support or follow this QR code:

Bild 4-1: QR code to the Rohde & Schwarz support page