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CE Declaration of Conformity

This is to certify that:

Rohde & Schwarz	2118.7400.02	DOCSIS Signal Generator (SFD)
SED Systems	132707-1	DOCSIS Signal Generator (SFD)

complies with the provisions of the Directive of the Council of the European Union on the approximation of laws of the Member States

- Relating to electrical equipment for use within defined voltage limits (2006/95/EC)
- Relating to electromagnetic compatibility (2004/108/EC)
- Relating to the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) (2011/65/EU)
- Relating to waste electrical and electronic equipment (WEEE) (2012/19/EU)

Conformity is proven by compliance with the following standards:

EMC

EN 61326-1:2013
EN 61326-2-1:2013
EN 55011:2009 +A1:2010
EN 61000-3-2:2006+A2:2009
EN 61000-3-3:2008
KN 61000-4-11

Safety

EN 61010-1:2010
CAN/CSA-C22.2 No. 61010-1
UL 61010-1

For the assessment of electromagnetic compatibility, the limits of radio interference for Class A equipment as well as the industrial immunity requirements have been used as a basis.

RoHS/WEEE Certificate

This is to certify that:

Rohde & Schwarz	2118.7400.02	DOCSIS Signal Generator (SFD)
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complies with the provisions of the Directive of the Council of the European Union on the approximation of laws of the Member States

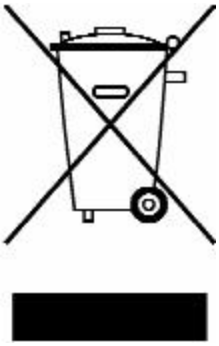
- Relating to the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) (2011/65/EU)
- Relating to waste electrical and electronic equipment (WEEE) (2012/19/EU)

RoHS

Conformity is proven through analysis of each component part within the product typically confirmed by each manufacturer stating compliance.

WEEE

Product labelling is in accordance with EN 50419



Documentation Overview

Getting Started

The printed Getting Started is delivered with the R&S SFD. On CD-ROM, Getting Started is provided in PDF format. It contains the following information:

- Chapter 1

  This chapter describes unpacking the instrument, the front and rear panels and getting it ready for operation.

- Chapter 2

  The chapter gives a brief introduction to the instrument and an overview of its functions.

- Chapter 3

  This chapter describes the options for operating the instrument.

User Manual

The User Manual is provided on CD-ROM. It provides the following information:

- Chapter 1

  This chapter describes each of the transmission modes in detail.

- Chapter 2

  This chapter describes all the parameters that can be set in the web GUI.

- Chapter 3

  This chapter describes the details of using SCPI.

- Chapter 4

  This chapter describes SNMP and how to access the MIB.

- Chapter 5

  This chapter describes details for feeding the SFD with data.

- Chapter 6

  This chapter provides the R&S SFD specifications.

- Chapter 7

  This chapter describes maintenance required for the instrument.

Online Help

The online help provides both the Getting Started and User Manual in PDF format.

CD-ROM

Each unit is delivered with a CD-ROM that contains a copy of both the Getting Started and User Manual in PDF format.

Conventions Used in the Documentation

The following conventions are used throughout the R&S SFD Getting Started.

Typographical conventions

Convention	Description
“Graphical user interface elements”	All names of graphical user interface elements both on the screen and on the front and rear panels, such as dialog boxes, softkeys, menus, options, buttons etc., are enclosed by quotation marks.
“KEYS”	Key names are written in capital letters and enclosed by quotation marks.
Input	Input to be entered by the user is displayed in italics.
`File names, commands, program code`	File names, commands, coding samples and screen output are distinguished by their font.
"Links"	Links that you can click are displayed in blue font.
"References"	References to other parts of the documentation are enclosed by quotation marks.

Other conventions

- **Remote commands**: Remote commands may include abbreviations to simplify input. In the description of such commands, all parts that have to be entered are written in capital letters. Additional text in lower-case characters is for information only.

The terms "**select**" and "**press**" may refer to any of the described methods, i.e. using a finger on the touchscreen, a mouse pointer in the display, or a key on the device or on a keyboard.

1 Putting the Instrument into Operation

1.1 Explanation of the Front Panel

This section provides an overview of the connectors and LEDs on the front panel.

Figure 1-1 SFD Front Panel

Data SFP+ LED

Indicates a link has been established over the SFP+ interface.

Data SFP+ Connector

An SFP+ connector is provided for the user to insert an SFP+ module to stream data to the DOCSIS 3.0 or DOCSIS 3.1 carrier.

Status LED

Provides an indication of the instrument status.

External Reference Status LED

Provides an indication of the external 10 MHz / 10.24 MHz frequency reference status.

Downstream LED

Provides an indication that the Downstream RF output is active.

Downstream RF Output

F-type connector for the Downstream RF output.

Upstream LED

Provides an indication that the Upstream RF output is active.

Upstream RF Output

F-type connector for the Upstream RF output.

1.2 Explanation of the Rear Panel

This section provides an overview of the connectors on the instruments rear panel. Specifications for the connectors are contained in the data sheet.

Figure 1-2 SFD Rear Panel

AC power connector

The instrument is equipped with a universal power supply that accepts an AC voltage range from 85 to 264 VAC at a frequency range from 47 to 63 Hertz. No external switching or modification of the fuse is necessary.

AC power switch

The AC power switch is located to the left of the AC power connector.

AC power fuse

See section “AC Power Fuses” and section 6 of the User Manual.

Reference In Connector

BNC 50 ohm connector input for an external 10 MHz or 10.24 MHz frequency reference.

AUX Connector

RJ-45 connector for a proprietary auxiliary interface. This connector includes link and activity LEDs.

Control LAN Connector

RJ-45 connector allows the user to connect to SFD to monitor and control it. This connector includes link and activity LEDs.

Trigger IN Connector

BNC 50 ohm connector used as an input for triggering an upstream burst carrier.

Marker OUT Connector

BNC 50 ohm connector used as an output marker relative to the start of an upstream burst carrier.

Network Reset Button

Push button that will reset the network configuration to factory by pressing and holding for 3 seconds, then releasing.

1.3 Preparing for Operation

The following section describes how to prepare the instrument for operation and how to connect external devices. Please observe the general safety instructions for operating the instrument.

1.3.1 Shipping

NOTICE

The R&S DOCSIS Signal Generator (SFD) is comprised of very sensitive electronic components that are susceptible to damage during shipment if not properly packaged. It is recommended to always use original product shipment packaging when shipping the SFD anywhere. In instances when the original shipping container is no longer available the SFD must be packaged in a double walled cardboard box or stronger package with at least 4 inches of expanding foam or new bubble wrap on all sides, edges, corners and faces of the SFD. The package must have "Handle with Care" and "Do Not Drop" labels affixed to the exterior of the box in a clearly visible manner. If not properly packaged the warranty and standard repair fee are void.

1.3.2 Unpacking the Instrument

- After unpacking the instrument, check the supplied equipment against the delivery note to make sure all items are present.
- Carefully check the instrument for possible damage.
- Should there be any damage, please inform the carrier immediately. Keep the packing material to support your claim.
- The original packaging is also useful for transporting or shipping the R&S SFD later on.

1.3.3 Standalone Operation & Orientation

The instrument is designed for interior use only as a standalone device.

Please note that permitted operating orientation for the R&S SFD is horizontal (NOT tilted by 90° such that the left or right side is pointing upwards). The area next to the unit must remain un-obstructed to provide adequate airflow through the meshed ventilation grid on each side.

1.3.4 Safety Instructions

1.3.4.1 General Safety Instructions

NOTICE

Any noncompliance with these instructions can damage the instrument.

Prior to putting the instrument into operation, check the following:

- The instrument cover is in place and screwed on.
- Vent holes are not obstructed, and air flow is not blocked on the side panels. The spacing from the wall should be at least 1 cm.
- The signal levels at the inputs do not exceed permissible limits.
- The outputs of the instrument are not overloaded or incorrectly connected.
- In particular, please heed the maximum permissible reverse power allowed on the RF outputs and ensure a DC voltage is not applied to the RF output.
- The instrument may be operated only in a horizontal position, and the surface on which it is placed must be level.
- The ambient temperature must be in the range specified in section 4 of the User Manual.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

1.3.4.2 Protective Measures against Electrostatic Discharge

NOTICE

Damage to the equipment under test due to electrostatic discharge

In order to avoid damage to the electronic components of the equipment under test (EUT) due to electrostatic discharge when touched, we recommend that you use the appropriate protective equipment.

1.3.4.3 EMC Safety Precautions

NOTICE

Prevent electromagnetic interference

To prevent electromagnetic interference, the instrument must be operated only when closed and with all shielding covers fitted. Only suitable and shielded signal and control cables may be used.

- This applies particularly to cables that are connected to the rear or front panel. Regardless of the data rate and the packet timing of the transport stream, high signal levels can occur at individual points in the signal spectrum. To avoid EMC problems, the cables should have at least 80 dB shielding protection up to 1 GHz. This generally requires the use of cables with double shielding.
- When wiring the LAN interface (10/100/1000 BASE-T), make sure that a suitable cable (e.g. Category 5e) is used.

1.3.5 Connecting the Instrument to AC Power

The instrument is equipped with a universal power supply that accepts an AC voltage range of 85 to 264 VAC at a frequency range of 47 to 63 Hertz. No external switching or modification of the fuse is necessary. The AC power connector is at the rear of the instrument.

- Use the supplied AC power cable to connect the instrument to the AC power supply. Since the instrument complies with safety class EN61010-1, it should only be connected to a socket with a ground contact.

  A standard EU power cord (with CEE 7/7 plug) is provided with every unit and if the buyer is located outside the EU, a power cord compliant with safety regulations for that location is supplied.
- Use only the supplied detachable mains power cable or a properly rated replacement cable.
- Set the AC switch on the rear of the instrument to the **I** position.

1.3.6 AC Power Fuses

Before changing the fuses, switch off the instrument and disconnect it from the power supply.

The instrument is equipped with one fuse (see section 6 of the User Manual). The fuse is located beside the AC power switch (in the AC inlet) on the rear panel of the instrument.

Changing the fuse:

- Open the cover on the fuse box and remove the fuse holder.

- Replace defective fuse and put the fuse holder back into place.
- Close the fuse box cover.

1.3.7 Internal Battery

There is a non-user serviceable battery on board the R&S SFD to power the real-time clock. The battery is a non-rechargeable 3.0V lithium BR2032 type.

1.3.8 Instrument Startup

Once the instrument has powered up, the unit must boot. During boot up the status LED on the front panel is amber. At completion of boot up the status LED turns green unless a fault has been detected in which case it turns red.

1.3.9 Switching Off the Instrument

- Set the AC switch on the rear of the instrument to the **O** position. None of the LEDs on the front panel should be lit.

Note:
If you set the power switch to the O position before the instrument settings have been saved, the current settings will be lost.

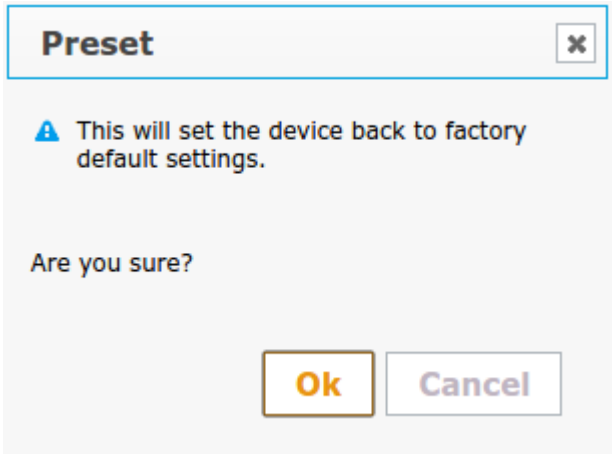
CAUTION
In the event of a hazardous situation, unplug the device from power. Ensure the power plug is easily reachable and accessible at all times.

1.3.10 Functional Check

The R&S SFD automatically monitors the health of the instrument during power-up and continuously during operation. When the instrument detects a fault the status LED turns red. There are no serviceable parts. This means the unit must be returned to the manufacturer for service.

1.3.11 Presets

When the user clicks the “Presets” menu item the unit gets set back to factory presets after the user confirms this action in a pop-up window (below).



1.4 Notes on the Operating System and Firmware

The instrument uses a Linux operating system. Access is not provided to the operating system but rather to a webserver through which a user can configure the instrument's network settings. More detailed information is provided in section 2 of the User Manual.

1.4.1 Installing the Software

NOTICE

- Only software authorized by Rohde & Schwarz for use in the instrument may be installed. In case of doubt, please contact your local Rohde & Schwarz representative.
- Changes to the system are only permissible in agreement with Rohde & Schwarz.
- Updating the operating system, e.g. installing a service pack, is not allowed without permission.

If any of the above actions are NOT taken, the stability and performance of the system may be impaired. Rohde & Schwarz shall not assume any liability for faults caused by impermissible manipulations of the system.

1.5 Connecting the Instrument to a Network (LAN)

The instrument is equipped with a network connection and can be connected to an Ethernet LAN (local area network). The instrument can also be remote-controlled and manually operated in the network. Remote operation allows someone to operate the instrument from an external computer situated anywhere in the world. For example, a user working in one part of a building can operate one or more instrument units that are part of a test setup situated in another part of the building. Remote control of the instrument via the LAN interface is described in Chapters 3 and 4 of the User Manual (on the supplied CD-ROM).

Refer to section 2.4 of the User Manual for detailed information about configuring the instrument for connection to a network.

1.5.1 Connecting to the Network

NOTICE

Always coordinate the connection of the instrument to the network with the network administrator. Any errors that occur during the connection process can affect the entire network. Make sure that the instrument is switched off when you connect and disconnect the network cable. This is the only way to ensure that the network connection is reliably detected and any disruptions during the operation of the instrument are avoided.

The instrument is connected to the LAN using a standard RJ-45 cable via the Control LAN interface on the rear of the instrument.

Configuring the instrument for network operation

The network interface functions with 10/100/1000 Ethernet IEEE 802.3u. The TCP/IP network protocol and the associated network services are preconfigured. To exchange data within a LAN, every computer or instrument that is connected must have a unique IP address.

Networks with DHCP

The instrument can be configured for networks using the dynamic host configuration protocol (DHCP). In such networks, the instrument is automatically assigned a free IP address. Depending upon the configuration of the network you may have to contact the network administrator to configure a DHCP server to provide an IP address for the instrument.

Networks that assign fixed (Static) IP

In networks that assign static IP addresses, the network administrator usually handles this process. The fixed IP address must be entered into the unit using an IP connection and a web browser, see point to point connection below or using a zero-conf address. See below.

Zero Conf

Many devices support a method of self configuration, it is often called Zero Conf, Bonjour or mDNS. This is process is specified in RFC 3927. The unit finds a unique address in the block 169.254.0.0 netmask 255.255.0.0. The device can be found by browsing the network. The device can be found by looking for a name of the form "RSSFD-*.local" where the * is replaced by the unit serial number. Open a cmd prompt (DOS prompt) and ping the unit with the command ***ping RSSFD-XXXXXX.local***. The ping command will return an IP address. The computer's network configuration may need to be modified to communicate with the unit. Once the computer's network configuration is properly set, enter the IP address in a web browser.

Point-to-point connections

To set up a single network (a LAN connection between an instrument and a single computer without integration into a larger network), an IP address needs to be assigned to the instrument and the computer. The IP addresses 192.168.10.xxx are available for use here, where xxx can assume values of 2 to 254, and the value for the subnet mask is 255.255.255.0. Either a straight or crossover cable can be used as the instrument automatically detects the configuration of the connected equipment and reconfigures itself to initiate communication.

Network Configuration Reset

In the event the network is misconfigured or the network configuration is lost, the network configuration can be reset to the factory default. To reset the network configuration:

1. Press the "reset" button located at the rear of the R&S SFD unit
2. Hold the button for 3 seconds, then release

The unit will now use the factory default network configuration.

2 Brief Introduction

2.1 Feature Set

Downstream channel features

- DOCSIS 3.1 channel
- DOCSIS 3.0 (J.83/A/B/C) channel
- Control of frequency, level, FEC, constellation and bandwidth
- Internally generated MPEG-2 transport streams or pseudo random bit sequence (PRBS), or external data feed via IP

Upstream channel features

- DOCSIS 3.1 OFDMA signal
- DOCSIS 3.0 ATDMA or SCDMA signal
- Unused minislots can be filled with “load” CM traffic

Signal interference and distortion simulation

- Additive white Gaussian noise (AWGN)
- Superimposed amplitude modulation for simulation of AC hum
- Payload bit error ratio (BER)
- Oscillator induced adjustable phase noise

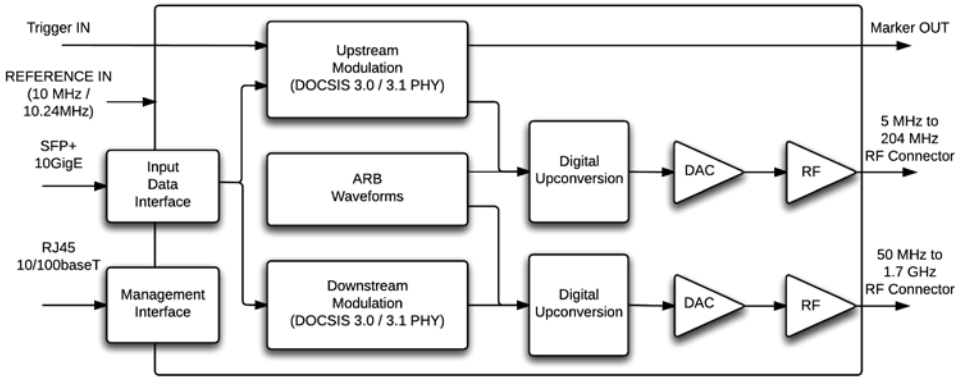
Key Facts

- Frequency range in downstream: 47 MHz to 1218 MHz (extendable to 1794 MHz)
- Frequency range in upstream: 5 MHz to 204 MHz
- DOCSIS 3.1, DOCSIS 3.0, J.83/A/B/C and analog TV
- ARB playout bandwidth up to 200 MHz

2.2 Basic Instrument Concept

The R&S SFD is a small form factor advanced piece of test equipment designed to generate a single DOCSIS signal. Configuration and control of the unit is done via the web GUI, SNMP or SCPI.

The R&S SFD operates in one of two main modes: Downstream or Upstream. In each mode a single DOCSIS 3.0 or 3.1 signal may be generated in real time. Alternatively, an arbitrary waveform may be output. The unit comes with a default configuration for each mode. Switching from one mode to another may result in a delay of up to 1 minute in operating the unit as the R&S SFD must load a new configuration file into the FPGA.



The R&S SFD has two modes Downstream and Upstream. In Downstream mode the R&S SFD is able to output a DOCSIS 3.1 channel with a maximum bandwidth of 192 MHz. The valid output frequency range for this mode is from 108 MHz to 1,218 MHz. With the Extended DOCSIS 3.1 license option the R&S SFD supports a valid output frequency range up to 1,794 MHz.

The R&S SFD is also able to generate a legacy DOCSIS 3.0 carrier with a valid output frequency range from 47 MHz to 1,218 MHz. Legacy DOCSIS 3.0 carriers can be set to one of three RF transmission types: J83B, J83C or DVB-C.

The Upstream mode allows users to transmit a real-time data encoded burst DOCSIS 3.0 or 3.1 signal. The Upstream burst signals are initiated using the Trigger In interface and a Marker Out signal is asserted before transmission. There are two DOCSIS 3.0 options for the upstream signal: A-TDMA and S-CDMA. The valid output frequency range is between 5 MHz and 85 MHz.

The R&S SFD is also capable of generating a real-time data encoded DOCSIS 3.1 OFDMA signal. The following burst types are available: Data Mode, Initial Ranging Mode, Fine Ranging Mode, Wideband Probing Mode, or Bandwidth Request (BW REQ) Mode. For Data Mode and Fine Ranging Mode, the payload can be provided via the SFP Data Interface. For Initial Ranging Mode and BW REQ Mode, the payload is customizable through the Web GUI. The valid output frequency range for this mode is from 5 MHz to 204 MHz.

The Arbitrary Waveform Generator mode allows users to play ARB files on either upstream or downstream modes.

The SFD can also simulate the addition of AWGN in all modes.

The flexible signal generation capabilities of the SFD enable it to simulate real-time data encoded channels in a reproducible manner, making it ideal for testing tuners, cable modems, and upstream CMTS receivers.

The complex signal generation process can be conveniently controlled from a PC or via a web interface. Remote control through SCPI commands enables the generator to be used in automatic test systems. The SFD can be adapted to various application requirements thanks to its software option concept.

3 Operating the Unit

3.1 Operating Concept

Getting Started

Modulator cable connections checklist:

- AC power
- Downstream RF output connected to test equipment (e.g., spectrum analyser, receiver, video analyser).
- Control LAN connector connected to computer or network
- Optional: SFP+, 10 MHz

When the unit is powered ON, default configuration is one Annex B J.83/B carrier at full composite power, Transmit is OFF. If data is not being input via the SFP+ port, the unit is stuffing the data stream with null packets. The Ethernet LAN port can be used to monitor R&S SFD status and re-configure it.

Factory Set IP Address

- The factory defaults for the SFD network configuration are:
  - IP Address = 192.168.10.1
  - Net Mask = 255.255.255.0
  - Gateway = 192.168.10.1

Once connection can be established with the R&S SFD, network settings can be changed via the web GUI. Consult your network administrator if you cannot connect to R&S SFD. The R&S SFD can be operated:

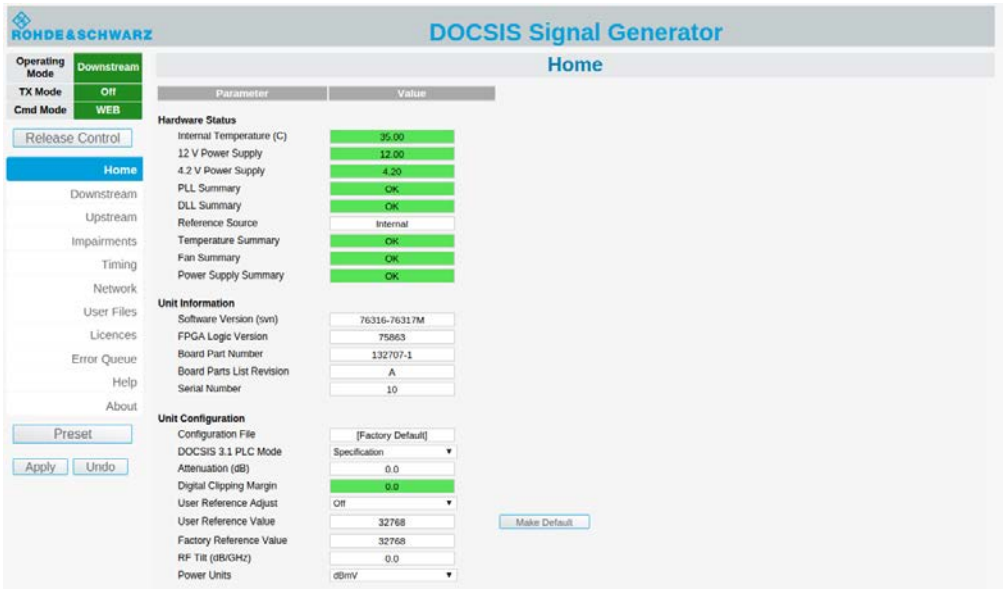
- From a PC using Web GUI, SCPI or SNMP.

3.2 Operation from a PC using the Web GUI

With a conventional browser access the R&S SFD web GUI by:

- Entering its IP address in the URL field (Refer to section 1.5)
- Entering its zero-conf IP address in the URL field

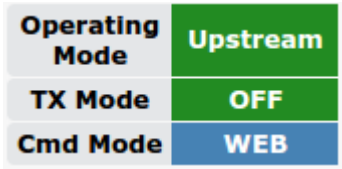
The user will see the screenshot below composed of the left and right panes.



3.2.1 Left Pane

The left pane of the GUI is always visible and it:

- Displays R&S SFD Operating Mode (DOWNSTREAM or UPSTREAM)
- Displays TX Mode (OFF, DOCSIS 3.1, DOCSIS 3.0, AWG, OFDMA, ATDMA or SCDMA)
- Displays Command Mode (entity in control of R&S SFD) (Web GUI, SCPI or SNMP)
- Contains a button labelled either
  - Take Control
  - Release Control
- Contains a menu that controls the information displayed in the right pane.
- A set of buttons (e.g., Apply, Undo) consistent with the selected right pane



Operating Mode

In **DOWNSTREAM** mode a single DOCSIS 3.0, DOCSIS 3.1, or ARB file transmission is available. Narrowband ARB files can be assigned to a DOCSIS 3.0 channel or a wideband ARB file up to 200 MHz can also be played out anywhere in the downstream spectrum.

In **UPSTREAM** mode an A-TDMA, S-CDMA or OFDMA burst DOCSIS transmission is available. Alternately, the transmission of ARB files over the upstream frequency range of 5 MHz to 204 MHz can be made.

TX Mode

The TX Mode defines the active carrier if there is one currently transmitting. This provides the user clear indication of what carrier is active as multiple carrier types can be configured at the same time, but only one carrier can be active. This is DOCSIS 3.1, DOCSIS 3.0, or ARB.

Command Mode

Only one entity is allowed to have control of the R&S SFD at a given time. This means only that entity is allowed to change R&S SFD settings. All entities are allowed to read settings and status at the same time. R&S SFD responds to requests from all entities in a serial fashion to display settings and status.

SNMP is the default entity in control. If SCPI establishes connection with the R&S SFD it becomes the controlling entity and has a higher priority than SNMP. If a web GUI user establishes a connection, the web GUI is allowed read-only access. If a web GUI user wants to become the controlling entity, it has the highest priority and the user needs only to click the Take Control button (see below).

Button – Take/Release Control

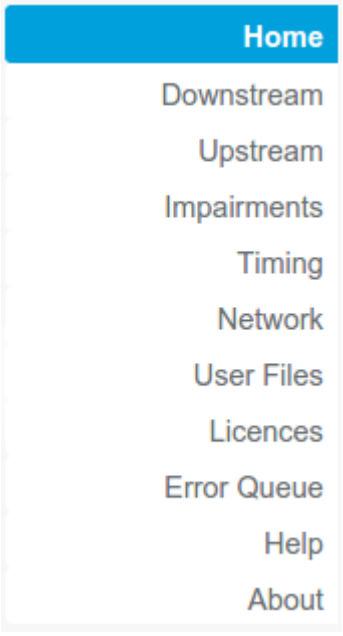
When a web GUI user clicks the “Take Control” button, that web GUI becomes the controlling entity. If a web GUI with control has no activity for 30 minutes, control of the R&S SFD automatically reverts back to the previous user.

When a web GUI user wishes to relinquish control, the user clicks the “Release Control” button.

If a second web GUI uses opens a window on the same R&S SFD, he can take over control from the previous web GUI user with the “Take Control” button.

Menu for Right Pane Information

The user uses the menu in the left pane to change the information displayed in the right pane. Each menu item selection is discussed in the next section.

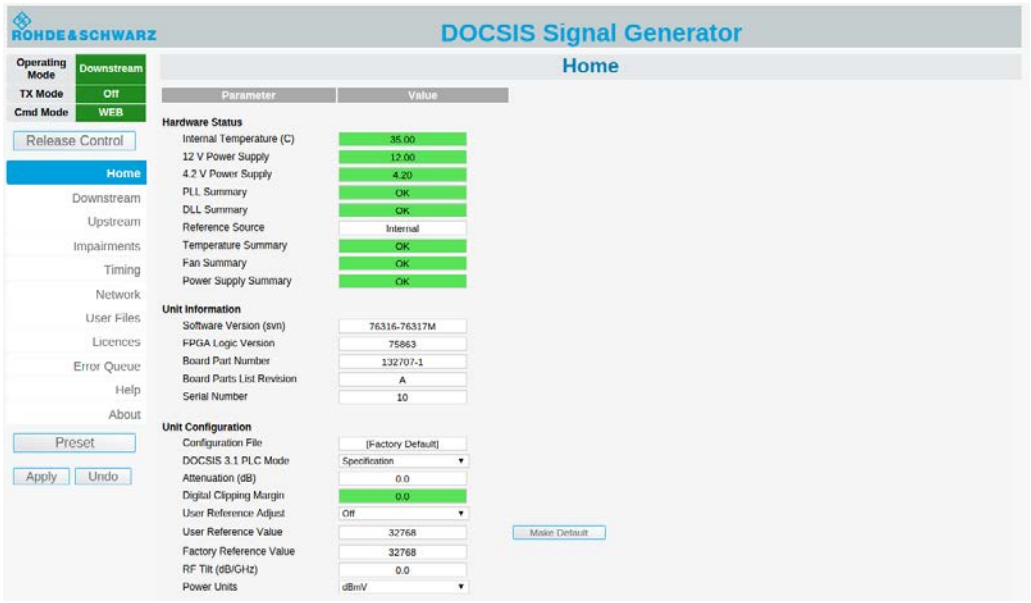


3.2.2 Right Pane

The parameters displayed in each of the right pane windows and related buttons are described in detail in section 2 of the User Manual.

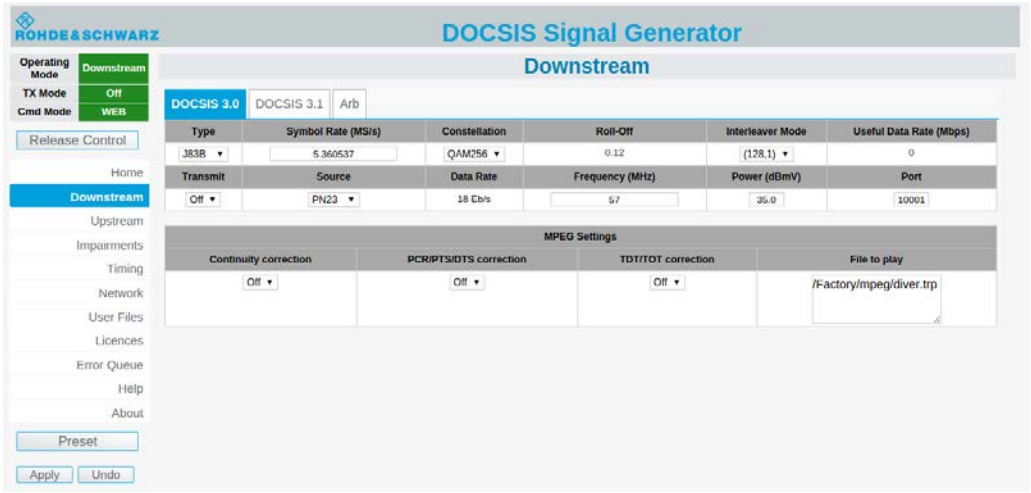
Home

When the user clicks the “Home” menu item the right pane changes to the screenshot shown below.

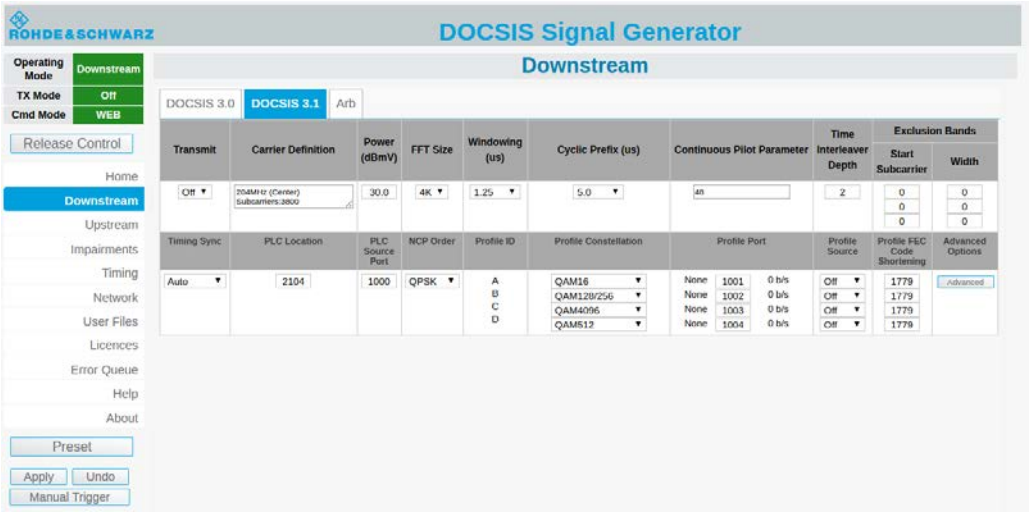


Downstream

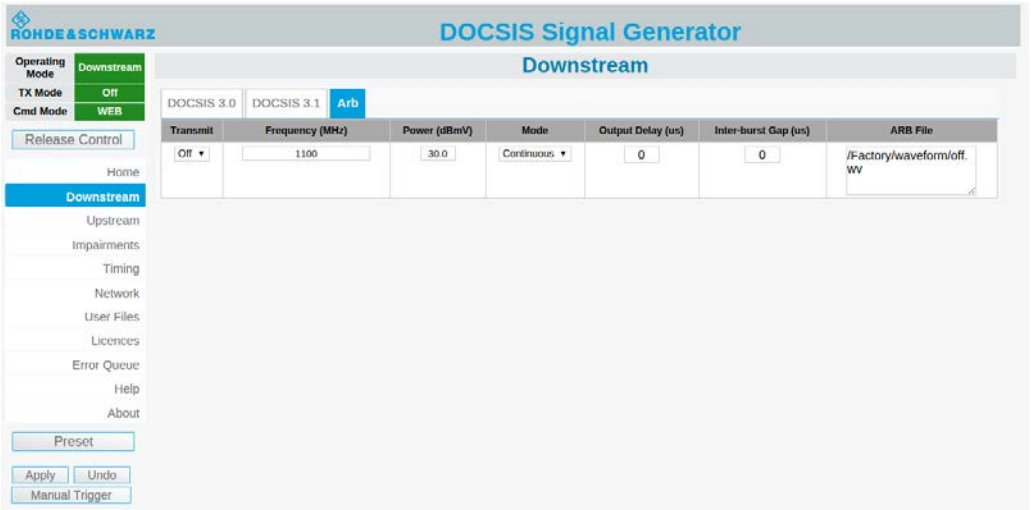
When the user clicks the “Downstream” menu item the right pane changes to the screenshot showing the “DOCSIS 3.0” tab shown below.



Clicking on the “DOCSIS 3.1” tab on the top changes to the screenshot shown below.

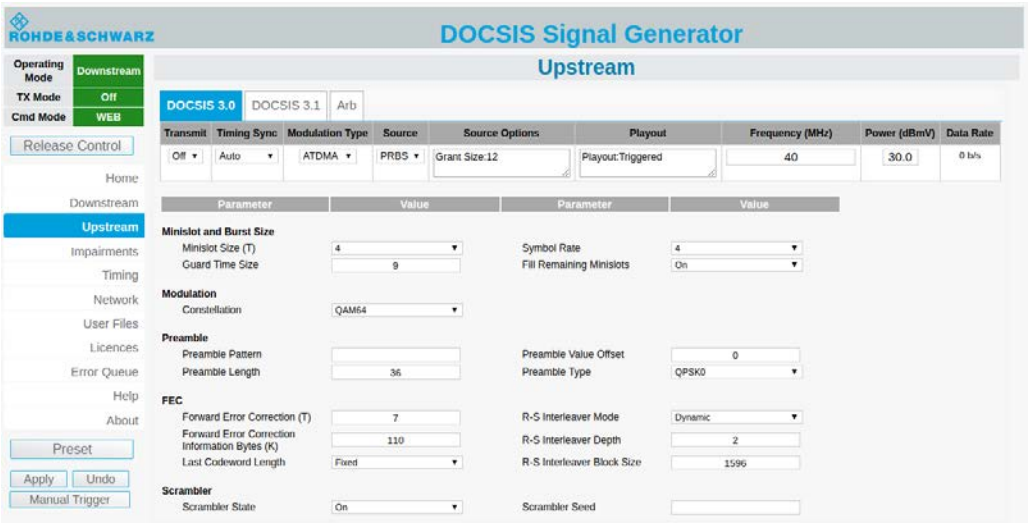


Clicking on the “ARB” tab on the top changes to the screenshot shown below.

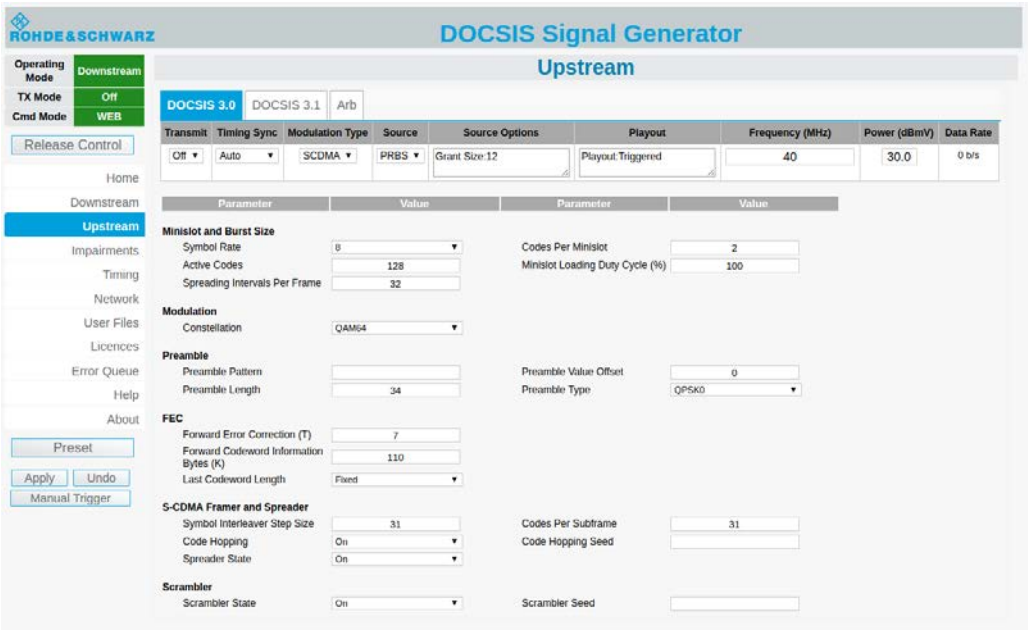


Upstream

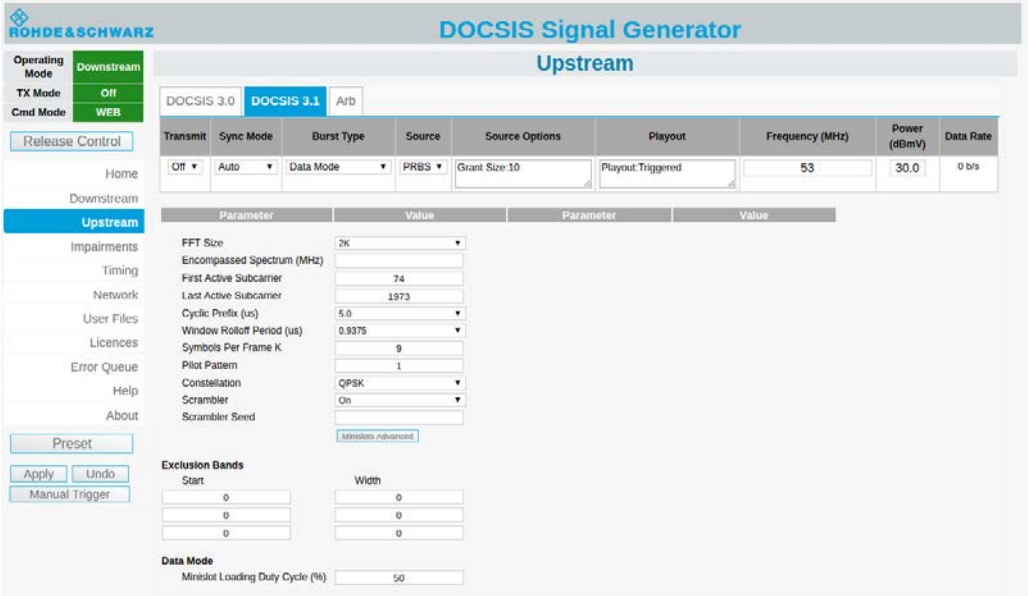
When the user clicks the “Upstream” menu item the right pane changes to the “DOCSIS 3.0” ATDMA configuration screenshot shown below.



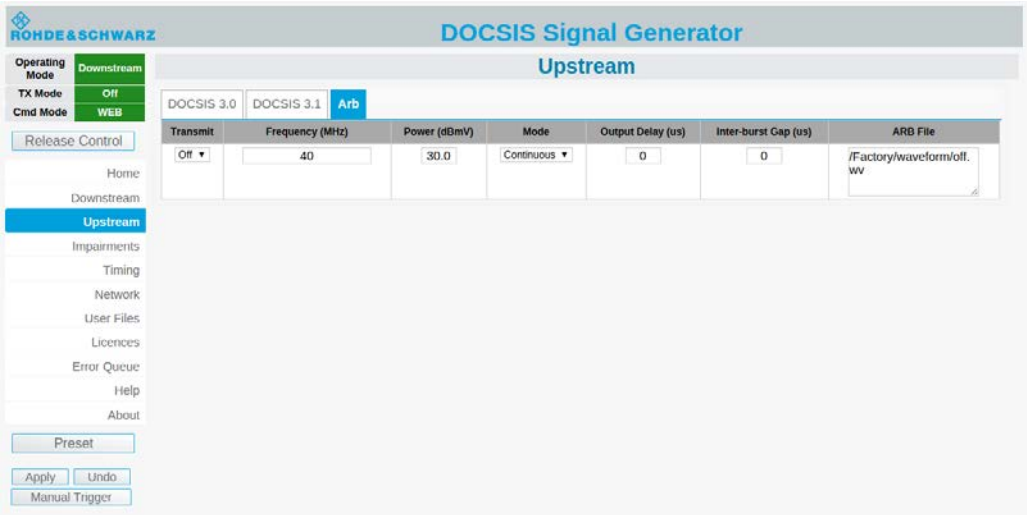
Changing the “Modulation Type” from the drop down menu at the top changes to the SCDMA screenshot shown below.



Clicking on the “DOCSIS 3.1” tab on the top changes to the OFDMA configuration screenshot shown below, where the desired “Burst Type” can be selected from the drop down menu.

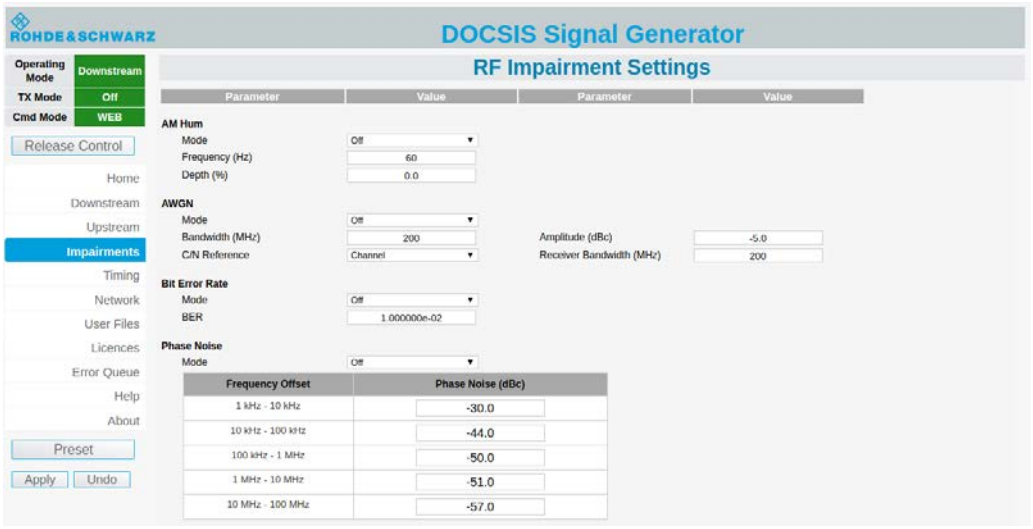


Clicking on the “ARB” tab on the top changes to the Upstream ARB screenshot shown below.



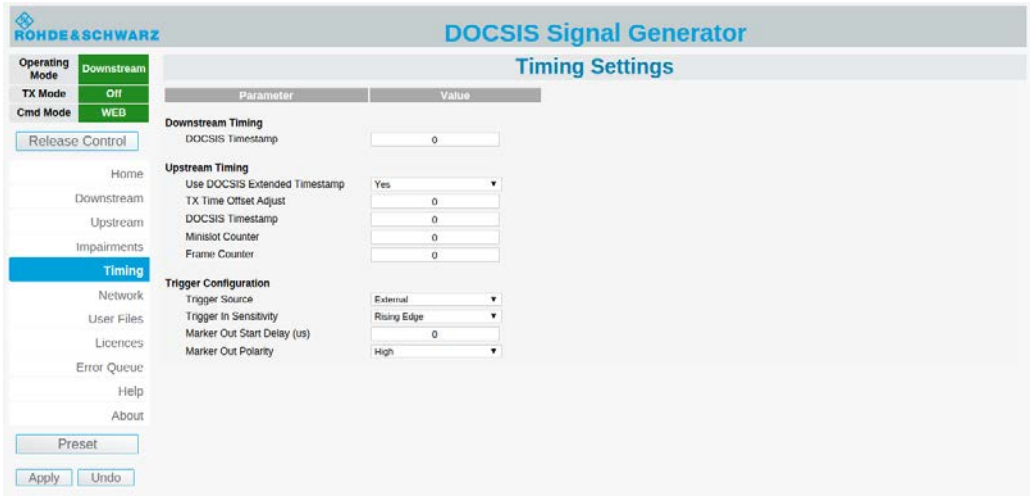
RF Impairments

When the user clicks the “Impairments” menu item the right pane changes to the screenshot shown below.



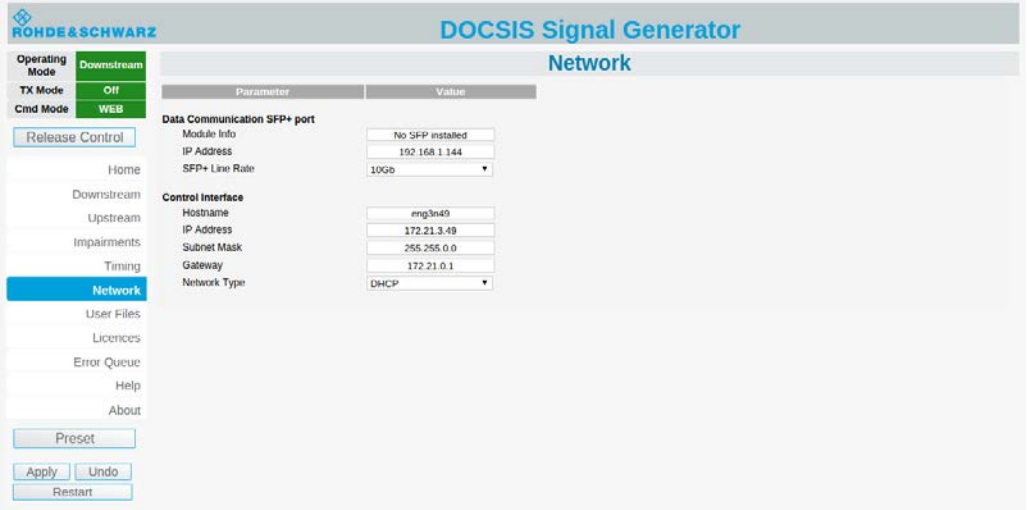
Timing Settings

When the user clicks the “Timing” menu item the right pane changes to the screenshot shown below.



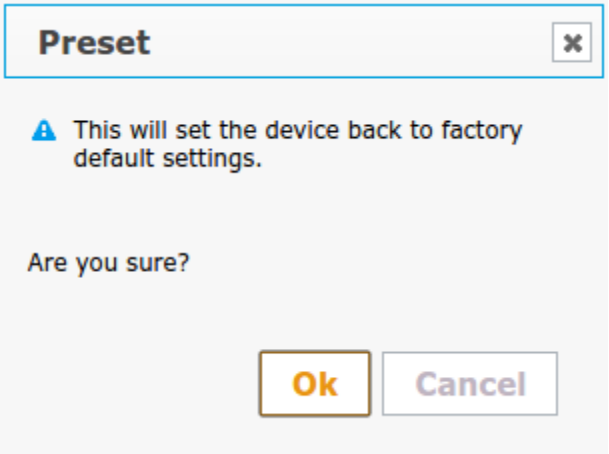
Network Settings

When the user clicks the “Network” menu item the right pane changes to the screenshot shown below.



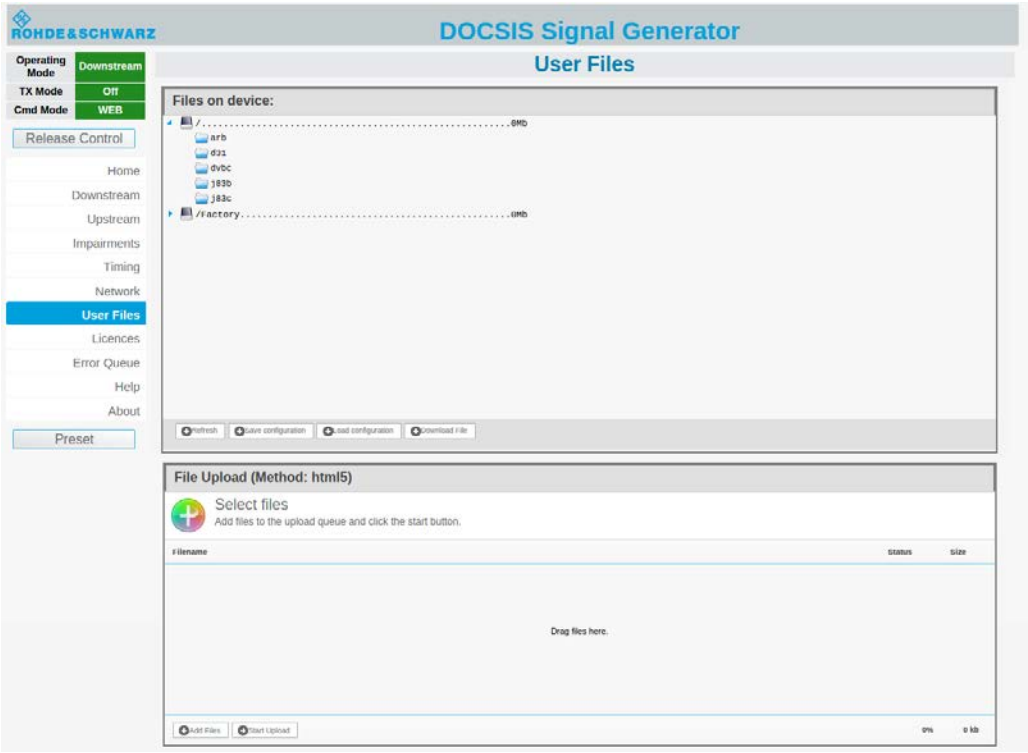
Presets

When the user clicks the “Presets” menu item the unit gets set back to factory presets after the user confirms this action in a pop-up window (below).



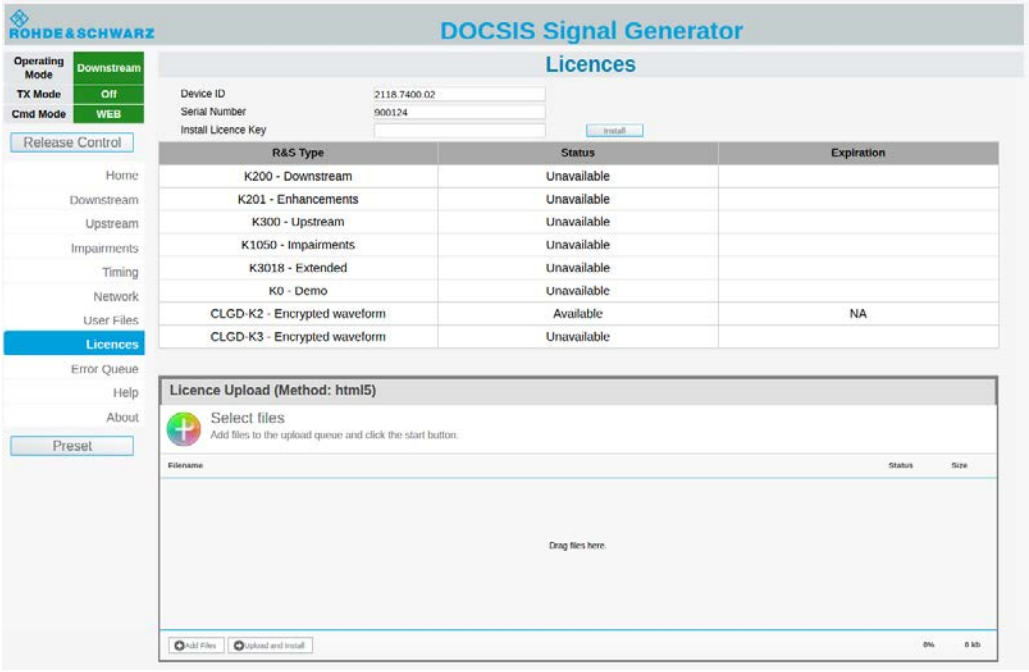
User Files

When the user clicks the “User Files” menu item the right pane changes to the screenshot shown below.



Licenses

When the user clicks the “Licenses” menu item the right pane changes to the screenshot shown below.



Help

When the user clicks the “Help” menu item the right pane displays:

- Getting Started link – clicking this link displays the guide in pdf
- User Manual link – clicking this link displays the manual in pdf
- RS-COMMON-MIB.mib link – clicking this link downloads the MIB to the PC “Downloads” directory. From there it can be integrated with an SNMP agent or browser. Both MIBs are required to access SNMP monitor and control functions of the SFD.
- RS-SFD-MIB.mib link – clicking this link downloads the MIB to the PC “Downloads” directory. From there it can be integrated with an SNMP agent or browser. Both MIBs are required to access SNMP monitor and control functions of the SFD.
- Open Source Software Acknowledgements – clicking this link displays the product open source software acknowledgements.