

Display Update is On/Off

Switches on/off the update of the displayed parameters.

Switching off the update of the displayed parameters increases the speed for certain settings.

Note: For optimum sweep performance with short dwell times and for fast settling times, it is recommended to switch off the display update.

Remote command:

[:SYSTem:DISPlay:UPDate](#) on page 454

4.2.3.7 Shutting Down and Rebooting the Instrument

The [Power On/Standby] front panel key switches the instrument from the standby to the ready state or vice versa. In remote operation form a remote computer or in manual control, the R&S SMB provides you with another possibility to shut the instrument down or to reboot the system.

- To access the required settings, select "Setup > Environment > Shut Down".



Remote control commands:

- [:SYSTem:SHUTdown](#) on page 453
- [:SYSTem:REBoot](#) on page 453
- see also [:SYSTem:REStart](#) on page 453

4.2.3.8 Network Settings

The "Network Settings" dialog shows the parameters relevant for identifying the instrument in a network. The R&S SMB is equipped with a network interface and can be connected to an Ethernet LAN (local area network).

How to connect the signal generator to the network is described in [Chapter 3.1.7, "Connecting to LAN"](#), on page 24 .

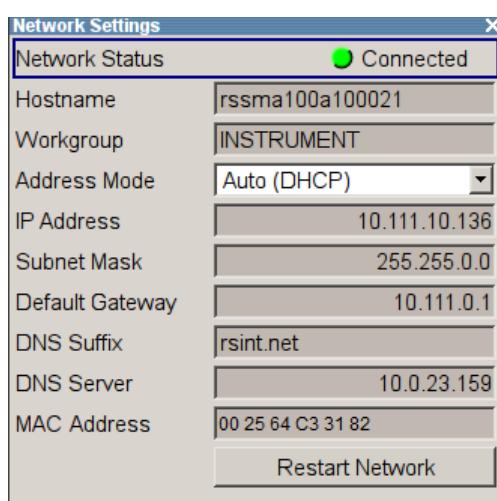
NOTICE**Risk of network errors!**

Connection errors can affect the entire network.

If your network does not support DHCP, or if you choose to disable dynamic TCP/IP configuration, you must assign valid address information before connecting the instrument to the LAN.

Contact your network administrator to obtain a valid IP address.

- ▶ To access this dialog, press the [setup] or [menu] key and select "Environment > Network Settings".



In the "Network Settings" dialog, you can configure the settings of the general network environment and specific identification parameters of the instrument in the network.

The remote commands required to remotely configure the network are described in [Chapter 6.15, "SYStem Subsystem", on page 437](#).

Network Status

Indicates that the instrument is connected to the network.

Remote command:

`:SYSTem:COMMunicate:NETWork:STATus?` on page 447

Hostname

Displays the host name.

Each instrument is delivered with an assigned host name, a logical name which can be used instead of the IP address. With the default network settings, the IP address is allocated by the DHCP server. This address may change each time the instrument is reconnected. Unlike the IP address, the host name does not change.

Note: Since the host name of the instrument is a protected parameter, you must first unlock protection level 1 to enable the entry (see [Chapter 4.2.3.13, "Protection", on page 113](#)).

It is recommended that you neither change the default network settings nor the host name in order to avoid problems with the network connection.

However, if you change the host name be sure to use an unique name.

Remote command:

[`:SYSTem:COMMunicate:NETWork\[:COMMON\]:HOSTname`](#) on page 445

Workgroup

Sets the individual windows workgroup name of the R&S SMB. This parameter is required in case the instrument is integrated in a windows network.

Note: Since the workgroup name of the instrument is a protected parameter, you must first unlock protection level 1 to enable the entry (see [Chapter 4.2.3.13, "Protection", on page 113](#)).

Remote command:

[`:SYSTem:COMMunicate:NETWork\[:COMMON\]:WORKgroup`](#) on page 445

Address Mode

Selects the mode for assigning the IP address.

"Auto (DHCP)" Assigns the IP address automatically, provided the network supports DHCP (Dynamic Host Configuration Protocol)

The network used must support automatic assignment of the IP address via DHCP or APIPA (Zeroconf) in order to use this function.

"Static" Enables you to assign the IP address manually.

Remote command:

[`:SYSTem:COMMunicate:NETWork:IPAddress:MODE`](#) on page 445

IP Address

Displays the IP address.

By default, the R&S SMB is configured to use dynamic TCP/IP configuration and to obtain the whole address information automatically.

If the network does not support DHCP or the attempt does not succeed, the instrument tries to obtain the IP address via Zeroconf (APIPA) protocol. IP addresses assigned via Zeroconf start with the number blocks 169.254.*.*.

Note: An IP address that is assigned via the Zeroconf protocol while the network requires an IP address assigned via the DHCP server may cause network connection failures.

See [Chapter 9.5, "Resolving network connection failures", on page 505](#).

To assign the IP address manually, select **Address Mode "Static"**.

Remote command:

[`:SYSTem:COMMunicate:NETWork:IPAddress`](#) on page 446

Subnet Mask

Displays the bit group of the subnet in the host identifier.

To assign the subnet mask manually, select **Address Mode "Static"**.

Remote command:

[:SYSTem:COMMUnicatE:NETWork\[:IPAddresS\]:SUBNet:MASK](#) on page 446

Default Gateway

Displays the gateway address.

To assign the gateway address manually, select [Address Mode "Static"](#).

This address identifies the router on the same network as the instrument that is used to forward traffic to destinations beyond the local network.

Remote command:

[:SYSTem:COMMUnicatE:NETWork\[:IPAddresS\]:GATEway](#) on page 446

DNS Suffix

Displays the primary DNS (**D**omain **N**ame **S**ystem) suffix, that means the DNS name without the host name part.

The DNS system uses the suffix for registration and name resolution to uniquely identify the instrument in the entire network.

To assign the DNS suffix manually, select [Address Mode "Static"](#).

Remote command:

[:SYSTem:COMMUnicatE:NETWork\[:COMMON\]:DOMain](#) on page 444

DNS Server

Determines the preferred server for name resolution. The DNS server contains the underlying numerical values that are required for name resolution of the host name as part of the IP address.

To select the DNS server manually, select [Address Mode "Static"](#).

Remote command:

[:SYSTem:COMMUnicatE:NETWork\[:IPAddresS\]:DNS](#) on page 445

MAC Address

Indicates the MAC (**M**edia **A**ccess **C**ontrol) address, a unique identifier of the network adapter in the R&S SMB.

Remote command:

[:SYSTem:COMMUnicatE:NETWork:MACaddress](#) on page 446

Restart Network

Terminates the network connection to the instrument and subsequently re-establishes it.

Used this function to resolve network problems.

Note: Only the connection of the instrument to the network restarts, the network itself is not affected.

Remote command:

[:SYSTem:COMMUnicatE:NETWork:REStart](#) on page 447