

- b) Mate the connectors along the common axis until the male pin of the connector of the cable engages with the female socket of the RF connector.

If your instrument is equipped with a test port adapter, see the application note [1MA100](#).

See "[RF 50 Ohm](#)" on page 54.

To prevent RF output switch-off

- ▶ **NOTICE!** If you set a too high output level without a load connected to the instrument, the reverse power can exceed a limit forcing the R&S SMB to switch off the RF output.
Connect a load with sufficient return loss as given in the data sheet.

3.1.11 Connecting to Ref In/Ref Out

The connector is at the [rear panel](#).

To connect to Ref In/Ref Out

For connection, the R&S SMB provides BNC connectors.

- ▶ Follow the instructions in "[To connect to non-screwable connectors \(BNC\)](#)" on page 26.

3.1.12 Switching On or Off

The following table provides an overview of power states, LEDs and power switch positions.

Table 3-1: Overview of power states

| State | LED | Position of power switch |
|---------|--------|--------------------------|
| Off | gray | [0] |
| Standby | yellow | [I] |
| Ready | green | [I] |

To switch on the R&S SMB

The R&S SMB is off but connected to power. See [Chapter 3.1.6, "Connecting to Power"](#), on page 24.

1. Set the switch on the power supply to position [I].
The switch is at the [rear panel](#).
The LED of the [ON/STANDBY] key is yellow.
2. Wait until the oven-controlled oscillator (OCXO) warms up. For the warm-up time, see data sheet.

3. Press the [ON/STANDBY] key at the [front panel](#).

The LED changes to green. The R&S SMB boots.

When starting for the first time, the R&S SMB starts with the default settings. When restarting the instrument, the settings depend on the instrument configuration before shut-down.

See [Chapter 4.2.8, "Storing and Loading Instrument Data - File Key"](#), on page 127.

When the instrument is switched on, it automatically monitors main functions.

A detected fault is indicated by an "ERROR" message displayed in the info line together with a brief error description. For in-depth identification of the error, press the [INFO] key. In response, a description of the error(s) is displayed. In addition to automatic monitoring, you can perform maintenance tasks.

See:

- [Chapter 9, "Status Information, Error Messages and Troubleshooting"](#), on page 499
- [Chapter 8.4, "Performing Maintenance Tasks"](#), on page 491

To reboot the instrument

If it is necessary to restart the instrument, e.g. if the firmware stops unexpectedly:

- ▶ Press the [STANDBY] key for approx. 5 s.

The R&S SMB reboots.

To shut down the product

The product is in the ready state.

- ▶ Press the [ON/STANDBY] key.

The operating system shuts down. The LED changes to yellow.

In the standby state, the power switch circuits and the OCXO are active. To deactivate them, disconnect the instrument from the power supply.

To disconnect from power

The R&S SMB is in the standby state.

1. **NOTICE!** Risk of data loss. If you disconnect the product from power when it is in the ready state, you can lose settings and data. Shut it down first.

Set the toggle switch on the power supply to position [0].

The LED of the [ON/STANDBY] key is switched off.

2. Disconnect the R&S SMB from the power source.