# R&S®RT-ZA50 Probe Interface Extender Manual





1803530702 Version 01



## 1 Product description

The R&S RT-ZA50 is a breakout box that leads out the Rohde & Schwarz probe interface 1 to the following standard connectors: USB-C for power and control, SMA for signal and DC jack for auxiliary supply.

Using the R&S RT-ZA50 probe interface extender together with the R&S RT-ZA51 probe to 3.5 mm adapter moves the Rohde & Schwarz probe interface 1 closer to your test setup. Thus, you can extend the distance between the DUT and your Rohde & Schwarz oscilloscope.

#### **Deliveries**

The delivery of the R&S RT-ZA50 (1803.5265.02) includes the following items:

R&S RT-ZA50 probe interface extender	1803.5271.02
DC power cable 12 V, 2.0 m	5750.0925.00
USB 3.1 cable C/C 1.0 m	3692.7124.00
SMA cable 18 GHz, 1.05 m	1337.9081.00
Data sheet	5215.8370.22
Manual	1803.5307.02

The R&S RT-ZA51 is a separate product (1803.5365.02) and not included in the delivery.

## 2 Connecting the adapter

For your safety, follow the safety instructions delivered with your Rohde & Schwarz oscilloscope and probe, and the instructions given in the manuals of your measurement equipment.

Observe the voltage limits and ratings of the adapter and the measuring instrument. Limits and ratings are marked on the products and listed in the data sheets.

### To connect the adapter to the oscilloscope

▶ Plug the R&S RT-ZA50 to a channel input connector of your oscilloscope. The input connector must have the Rohde & Schwarz probe interface 1.

#### To use R&S RT-ZA50 together with R&S RT-ZA51

- 1. Plug the R&S RT-ZA50 to a channel input connector of your oscilloscope.
- 2. Connect a Rohde & Schwarz active probe to the R&S RT-ZA51. The probe must have the Rohde & Schwarz probe interface 1, and 50  $\Omega$  input impedance.
- Connect both adapters using the USB and SMA cables, and optional DC power cable. The cables are delivered with R&S RT-ZA50.
  - With this configuration, the probe is powered and controlled from your Rohde & Schwarz oscilloscope. No additional power supply is necessary. You can also use user-defined cables up to 3 m for measurement setups further away from your oscilloscope.
- On the R&S RT-ZA51, set the jumper to DGND/NC to avoid ground offset currents.
- 5. If you use high-bandwidth probes or user-defined SMA extension cables, we recommend an additional frequency alignment. Therefore, you can use the proven probe feature, which is part of the R&S RTO/RTP-K121 deembedding option.

For further information, see the manuals of the R&S RT-ZA51 adapter, the probe and the oscilloscope used in your measurement setup.

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