Safety Instructions

This unit has been designed and tested in accordance with the EC Certificate of Conformity and has left the manufacturer's plant in a condition fully complying with safety standards.

To maintain this condition and to ensure safe operation, the user must observe all instructions and warnings given in this operating manual.

Safety-related symbols used on equipment and documentation from R&S:



Observe operating instructions



Weight indication for units >18 kg



PE terminal



Ground

terminal

Danger! Shock hazard



Warning! Hot surfaces



Ground



Attention! Electrostatic sensitive devices require special care

- The unit may be used only in the operating conditions and positions specified by the manufacturer. Unless otherwise agreed, the following applies to R&S products:
 - IP degree of protection 2X, pollution severity 2 overvoltage category 2, only for indoor use, altitude max. 2000 m.
 - The unit may be operated only from supply networks fused with max. 16 A.
 - Unless specified otherwise in the data sheet, a tolerance of $\pm 10\%$ shall apply to the nominal voltage and of $\pm 5\%$ to the nominal frequency.
- For measurements in circuits with voltages V_{rms} > 30 V, suitable measures should be taken to avoid any hazards.
 - (using, for example, appropriate measuring equipment, fusing, current limiting, electrical separation, insulation).
- If the unit is to be permanently wired, the PE terminal of the unit must first be connected to the PE conductor on site before any other connections are made. Installation and cabling of the unit to be performed only by qualified technical personnel.
- For permanently installed units without built-in fuses, circuit breakers or similar protective devices, the supply circuit must be fused such as to provide suitable protection for the users and equipment.
- 5. Prior to switching on the unit, it must be ensured that the nominal voltage set on the unit matches the nominal voltage of the AC supply network. If a different voltage is to be set, the power fuse of the unit may have to be changed accordingly.
- Units of protection class I with disconnectible AC supply cable and appliance connector may be operated only from a power socket with earthing contact and with the PE conductor connected.

- 7. It is not permissible to interrupt the PE conductor intentionally, neither in the incoming cable nor on the unit itself as this may cause the unit to become electrically hazardous.
 - Any extension lines or multiple socket outlets used must be checked for compliance with relevant safety standards at regular intervals.
- 8. If the unit has no power switch for disconnection from the AC supply, the plug of the connecting cable is regarded as the disconnecting device. In such cases it must be ensured that the power plug is easily reachable and accessible at all times (length of connecting cable approx. 2 m). Functional or electronic switches are not suitable for providing disconnection from the AC supply.
 - If units without power switches are integrated in racks or systems, a disconnecting device must be provided at system level.
- Applicable local or national safety regulations and rules for the prevention of accidents must be observed in all work performed.
 - Prior to performing any work on the unit or opening the unit, the latter must be disconnected from the supply network.
 - Any adjustments, replacements of parts, maintenance or repair may be carried out only by authorized R&S technical personnel.
 - Only original parts may be used for replacing parts relevant to safety (eg power switches, power transformers, fuses). A safety test must be performed after each replacement of parts relevant to safety.

(visual inspection, PE conductor test, insulationresistance, leakage-current measurement, functional test).

continued overleaf

Safety Instructions

- Ensure that the connections with information technology equipment comply with IEC950 / EN60950.
- 11. Lithium batteries must not be exposed to high temperatures or fire.
 - Keep batteries away from children.
 - If the battery is replaced improperly, there is danger of explosion. Only replace the battery by R&S type (see spare part list).
 - Lithium batteries are suitable for environmentally-friendly disposal or specialized recycling. Dispose them into appropriate containers, only. Do not short-circuit the battery.
- 12. Equipment returned or sent in for repair must be packed in the original packing or in packing with electrostatic and mechanical protection.

- Electrostatics via the connectors may damage the equipment. For the safe handling and operation of the equipment, appropriate measures against electrostatics should be implemented.
- 14. The outside of the instrument is suitably cleaned using a soft, lint-free dustcloth. Never use solvents such as thinners, acetone and similar things, as they may damage the front panel labeling or plastic parts.
- 15. Any additional safety instructions given in this manual are also to be observed.