

RTL 100

RISE TIME LOAD



Rise Time Load RTL 100

The relating standards*:

IEC/EN 61000-4-11

IEC/EN 61000-4-29

IEC/EN 61000-4-34

* The Rise Time Load can be used for certain tests within these standards. Additional equipment might be required. For detailed information, please contact sales@spitzenberger.de.

- ✓ Verification of voltage rise / fall time according to IEC/EN 61000-4-11, IEC/EN 61000-4-29 and IEC/EN 61000-4-34
- ✓ 100 Ω according to IEC/EN 61000-4-11
- ✓ Low inductive design
- ✓ 4-pole measurement

VERIFY RISE / FALL TIME REQUIREMENTS



Functional principle

The RTL 100 is a low inductive 100 Ω resistor for measuring the voltage rise and fall time of a source in accordance with IEC/EN 61000-4-11, IEC/EN 61000-4-29 and IEC/EN 61000-4-34. The source can be loaded with a 100 Ω resistive load via the input sockets of the RTL 100. A 4-pole measurement of the voltage rise and fall times can be performed using an oscilloscope (input voltage > 250 V) connected to the measurement sockets of the RTL 100.

To support in measuring the source's voltage rise and fall times, the APS menu provides a sequence for generating the four conditions (rise at 90°, fall at 90°, rise at 270° and fall at 270°).

If the voltage rise and fall times shall be measured with 50 Ω (for generators rated more than 50 A and less or equal than 100 A) or 25 Ω (for generators rated more than 100 A) according to IEC/EN 61000-4-34, two or four RTL 100 units can be connected in parallel.

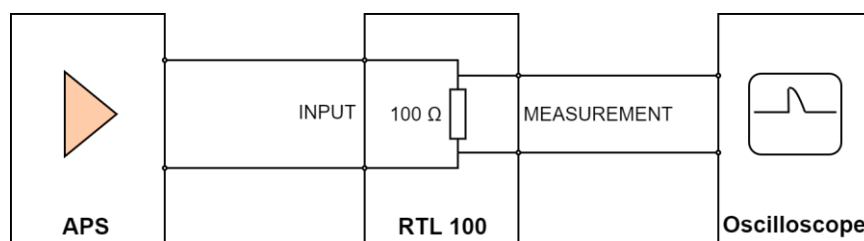


Fig. 1: RTL 100 principle schematic

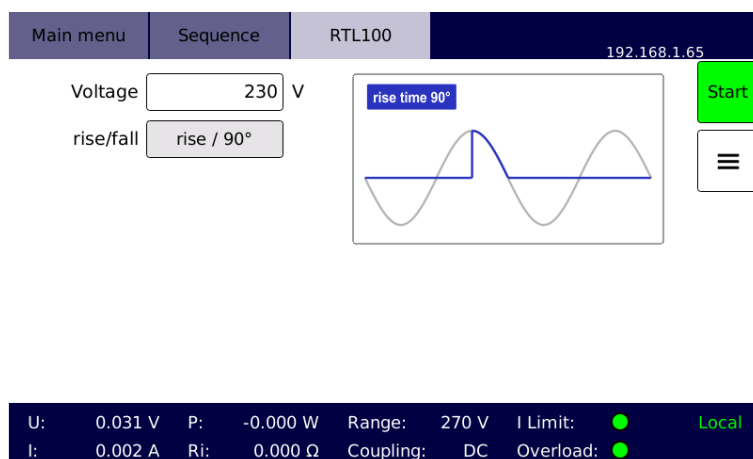


Fig. 2: APS menu for rise time measurement

TECHNICAL DATA – RISE TIME LOAD

	RTL 100
Max. input voltage (RMS)	240 V
Input	laboratory sockets
Resistance	100 Ω ±1 %
Inductance	< 1 μH
Continuous power dissipation (max.)	576 W
Measurement output	laboratory sockets
Cooling	forced air cooling
Protection circuits	overtemperature
Status lamps	overtemperature, power
Ambient temperature	+10 °C up to +40 °C
Storage temperature	-25 °C up to +60 °C
Relative humidity	non condensing, max. 80 % for temperature < 31 °C, decreasing linearly to 50 % at 40 °C
Ingress protection	IP20
Power supply (±10 %, 50/60 Hz)	230 V
Line protection, connection	2 A, Schuko
Housing	desktop, light grey (RAL 7035)
<i>Rise Time Load approx. dimensions (H x W x D)</i>	171 x 222 x 207 mm
Weight (approx.)	7 kg