ROHDE & SCHWARZ Make ideas real



# **R&S®NGL200 POWER SUPPLY SERIES** High precision source and sink



# **Key features**

What sets these power supplies apart from others?

- Fast regulation of output voltage with minimum overshoot and very fast load recovery time
- Minimum residual ripple and noise to supply interferencefree voltage to sensitive DUTs
- Readings with up to 6½ digit resolution are perfect for characterizing devices that have low power consumption in standby mode and high current in full load operation
- ► Two quadrants: operates as source or sink

# The perfect choice for

Battery tests	Power consumption tests	Key specifications	R&S®NGL201	R&S®NGL202
		Number of channels	1	2
		Max. output power	60 W	120 W
Simulation of voltage drops	Supplying sensitive designs	Output power per channel	max. 60 W	
		Output voltage per channel	0 V to 20 V	
		Output current per channel	$\leq$ 6 V: 6 A, > 6 V: 3 A	
		Load recovery time	< 30 µs	
		Resolution	1 mV / 0.1 mA	

Your benefit	Features
Optimized load recovery time with minimal overshoot	Due to the optimized load recovery time of < 30 µs with minimal overshoot during challenging load conditions, the R&S®NGL200 instruments are perfect when testing IoT and other battery-powered devices which require very little current in sleep mode and abruptly increase current when switching to transmit mode.
Low ripple and noise	To supply interference-free voltage to sensitive designs such as complex semiconductors and to support the development of power amplifiers and MMICs.
Sink and source operation	The linear two-quadrant output amplifier design of the R&S®NGL200 series enables sink and source operation to simulate batteries and loads.
6½ digit resolution	With up to 6½ digit resolution when measuring voltage, current and power, the R&S®NGL200 series is optimal for characterization of devices with low standby power consumption and high current in full load operation. It can even replace an additional DMM in many applications.

### Readings with up to 6½ digit resolution

With a resolution of up to 6  $\frac{1}{2}$  digits when measuring voltage, current and power, the R&S\*NGL200 power supplies are perfect for measurements on devices that have low power consumption in standby mode and high current in full load operation.



The high-resolution display provides additional information such as power values and statistics.

## Overvoltage protection (OVP), Overpower protection (OPP)

If the voltage/power rises above the configured maximum value, the channel is switched off and the appropriate symbol flashes on the display.

#### **Overcurrent protection (electronic fuse, OCP)**

The channels of the R&S<sup>®</sup>NGL200 power supplies are equipped with electronic fuses that can be set individually. If the channel current exceeds the set current, the channel is automatically switched off and a message is displayed.

#### **QuickArb function**

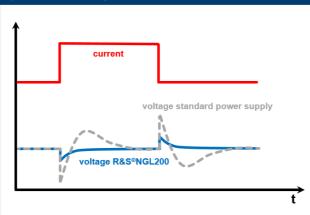
The Arb function lets you configure time/voltage or time/ current sequences. With up to 4096 points and a dwell time resolution of up to 1 ms, the QuickArb function sets new standards.

#### **Easy Ramp function**

The output voltage can be increased continuously within a time frame of 10 ms to 10 s to avoid abrupt rise of the supply voltage as it is sometimes required by sensitive applications.



### Optimized load recovery time



During challenging load conditions, most power supplies react with slow recovery times and overshoots. Specially developed circuits in the R&S®NGL200 series achieve a load recovery time of < 30  $\mu$ s with minimal overshoot, making them perfect for supplying sensitive components

#### Easy operation

The high-resolution capacitive touchscreen is the central operating element of the R&S®NGL200 power supplies. Icons clearly show the status of set protection or special functions.



When the power supply is in constant voltage mode, the numbers and the keys are green. Red is used for constant current mode. The output key lights up blue to indicate that the channels are switched on (active).

#### Two-quadrant operation, minimum ripple and noise

The architecture of the R&S®NGL200 power supplies allows them to function both as a source and a sink. The instruments automatically switch between sink and source operation. In this example, channel 2 works as a load.

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36.903 3 W 🌞 🔀	-2.170 43 W 🔅 🕵	
17.999 17 V	4.999 96 V	
2.050 28 A	-0.434 09 A	
3.000 0 A	1.000 0 A	

The linear design of the output stages reduces residual ripple and noise to a minimum and makes it perfect to support the development of power amplifiers and MMICs.

Ordering information	
Base unit	
Single-channel power supply	R&S®NGL201
Two-channel power supply	R&S <sup>®</sup> NGL202
Hardware options	
IEEE-488 (GPIB) interface	R&S®NGL-B105
Software options	
Digital I/O trigger	R&S <sup>®</sup> NGL-K103
System components	
19" rack adapter, 2 height units	R&S®HZN96

#### 绿测科技有限公司

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