



R&S®NGL202 versus Keithley 2306



Key features

- ▶ Fast regulation of output voltage with minimum overshoot and very fast load recovery time
- ▶ Minimum residual ripple and noise to supply interference-free 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 spikes
- ▶ Two quadrants: operates as source and sink

Your benefit	Features
Optimized load recovery time with minimal overshoot	<ul style="list-style-type: none"> ▶ Thanks to the optimized load recovery time of < 30 μs with minimal overshoot under challenging load conditions, the R&S®NGL200 instruments are perfect for testing IoT and other battery-powered devices that require very little current in sleep mode and abruptly increase current when switching to transmit mode
Display	<ul style="list-style-type: none"> ▶ The large capacitive touchscreen is the central operating element for the R&S®NGL202 power supply unit ▶ Briefly tapping a numeric value brings up a virtual keyboard to enter the desired value ▶ With its high resolution of 800 × 480 pixels, the display sets new standards for power supplies
Low ripple and noise	<ul style="list-style-type: none"> ▶ To supply interference-free voltage to sensitive designs, such as complex semiconductors, and to support power amplifiers and MMIC development
Sink and source operation	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ With up to 6½ digit resolution for voltage, current and power measurement, the R&S®NGL200 series is ideal for characterization of devices with low standby power consumption and high peak currents

Parameter	R&S®NGL202	Keithley 2306
Number of channels	2	2
Output voltage per channel	0 V to 20 V	0 V to 15 V
Max. output power per channel	60 W	60 W
Max. output current per channel	6 A (≤ 6 V output voltage) 3 A (> 6 V output voltage)	5 A (≤ 4 V output voltage) 4 A (> 4 V output voltage)
Programming resolution	1 mV / 0.1 mA	1 mV / 1.25 mA
Programming accuracy	< 0.02 % + 3 mV < 0.05 % + 2 mA	< 0.05 % + 3 mV not specified
Maximum sink current	3 A	3 A
Maximum sink power	120 W	50 W
Load recovery time	< 30 μs	< 40 μs
Output ramp function	EasyRamp	no
Arbitrary function	QuickArb	no
Readback resolution	10 μV / 10 μA	1 mV / 100 μA
Readback accuracy	< 0.02 % + 2 mV < 0.05 % + 250 μA	< 0.05 % + 3 mV < 0.2 % + 1 μA
Protection functions	OCP / OVP / OTP / OPP	OVP
Remote control interfaces	standard: USB / LAN optional: WLAN / IEEE-488 (GPIB)	IEEE-488 (GPIB)
Command processing time	< 6 ms	< 5 ms
Channels galvanically isolated	yes	no
Display	5", 800 × 480 pixel WVGA, capacitive touchscreen	2-line x16-character VFD display
Dimensions (W × H × D)	222 mm × 97 mm × 436 mm	213 mm × 133 mm × 348.3 mm
Weight	7.3 kg	8.2 kg



For prices and more information, visit
www.rohde-schwarz.com/product/NGL200

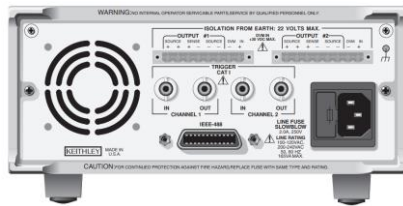
R&S®NGL202 interfaces versus Keithley 2306 interfaces

Interface	IEEE-488 (GPIB)	LAN	USB	WLAN
R&S®NGL202	optional	standard	standard	optional
Keithley 2306	standard	–	–	–

R&S®NGL202 interfaces



Keithley 2306 interfaces



Source, sink and 6 ½ digit resolution

- ▶ A resolution of up to 6 ½ digits is perfect for characterizing DUTs that have low power consumption in standby mode and high current in full load operation
- ▶ The R&S®NGL200 power supplies automatically switch from source to sink mode
- ▶ Operation as a load is indicated by a negative current reading
- ▶ In this example, channel 2 acts as a load
- ▶ The high-resolution display provides additional information such as power values and statistics



Display

R&S®NGL202 display

The very large capacitive touchscreen with 800 x 480 pixel resolution makes it easy to read the values even at great distances. Icons clearly show the status of the set protection or special functions. Briefly tapping a numerical value brings up a virtual keyboard to enter the desired value.



Keithley 2306 display

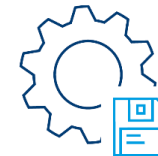
2-line x 16-character VFD display



Advantage factors of the R&S®NGL202 versus the Keithley 2306



QuickArb
4096 points
per cycle



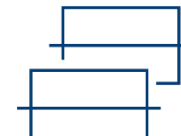
Save/recall
device settings



EasyRamp
10 ms to 10 s



Screenshot



FuseLink



WLAN
(optional)