ROHDE&SCHWARZ

Make ideas real

PS

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	► 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	 ► 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	► To supply interference-free voltage to sensitive designs, such as complex semiconductors, and to support power amplifiers and MMIC development	
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 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 μΑ	1 mV / 100 µA	
Readback accuracy	< 0.02 % + 2 mV < 0.05 % + 250 μA	$< 0.05~\% + 3~\text{mV}$ $< 0.2~\% + 1~\mu\text{A}$	
Protection functions	OCP / OVP / OTP / OPP	OVP	
Remote control interfaces	standard: USB / LAN optional: 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 \times H \times D)	222 mm × 97 mm × 436 mm	213 mm × 133 mm × 348.3 mm	
Weight	7.3 kg	8.2 kg	



R&S®NGL202 interfaces versus Keithley 2306 interfaces

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

R&S°NGL202 interfaces

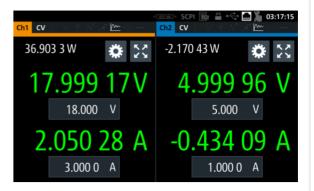


Keithley 2306 interfaces



Source, sink and 6 1/2 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.

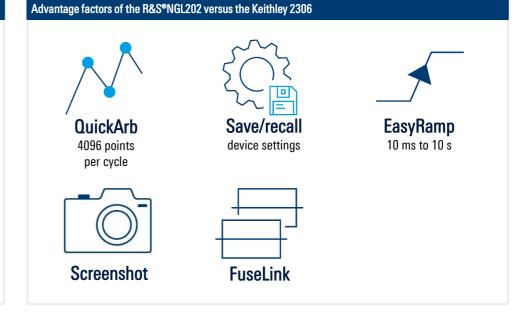




Keithley 2306 display

2-line x 16-character VFD display





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