R&S®NGL200

vs Keithley 2280S-32-6

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 in full load operation
- Two quadrants: operates as source or sink

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 6 ½ 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.

➤ For more information, visit www.rohde-schwarz.com/catalog/ngl200





Parameter	R&S®NGL201/NGL202	Keithley 2280S-32-6
Number of channels	1/2	1
Output voltage per channel	0 V to 20 V	0 V to 32 V
Max. output power per channel	60 W	192 W
Max. output current per channel	≤ 6 V output voltage: 6 A > 6 V output voltage: 3 A	6 A
Max. sink current per channel	3 A	0.45 A
Voltage ripple and noise (20 Hz to 20 MHz)	< 500 µV (RMS) < 2 mV (peak-to-peak)	< 1 mV (RMS) < 5 mV (peak-to-peak)
Current ripple and noise (20 Hz to 20 MHz)	< 1 mA (RMS)	< 3 mA (RMS)
Load recovery time (20 mV)	< 30 µs	< 50 µs
Programming resolution	1 mV / 0.1 mA	1 mV / 0.1 mA
Readback resolution	10 μV / 10 μΑ	100 μV / 10 nA
Readback accuracy voltage	< 0.02 % + 2 mV	< 0.02 % + 2 mV
Readback accuracy current	< 0.05 % + 250 μA	< 0.05 % + 10 μA
Protection functions	OCP / OVP / OPP / OTP	OCP / OVP /OTP
Arbitrary (min. step)	QuickArb (1 ms)	list mode (1 ms)
Remote control interfaces	standard: USB / LAN optional: WLAN / IEEE-488 (GPIB)	standard: USB / LAN optional: IEEE-488 (GPIB)
Display	5", 800 x 480 WVGA cap. touchscreen	4.3", 480 x 272 pixel
Dimensions W x H x D	222 mm x 97 mm x 436 mm	255 mm x 107 mm x 415 mm
Weight	7.1 kg / 7.3 kg	10.85 kg

R&S®NGL200 series and Keithley 2280S-32-6



R&S®NGL200 series

- 2 instruments, 1 or 2 channels
- Power: 60 W per channel
- Output voltage:0 V to 20 V per channel
- Max. sink current: 3 A

Keithley 2280S series:

- 2 instruments, both are single-channel
- Type 2280S-32-6: 32 V / 6 A / 192 W Type 2280S-60-3: 60 V / 3 A / 192 W
- Max. sink current: 0.45 A



Display size

R&S®NGL200

The very large display with 800 x 480 pixel resolution makes it easy to read the values even at great distances. Additional information such as power values or statistics can be displayed. Icons clearly show the status of the set protection or special functions

Keithley 2280S series

4.3" display with 470 x 272 pixel resolution; it is also used for graphical diagrams





Source and sink and 61/2 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. Operating as a load is indicated by a negative current reading.

Large touchscreen – new standard for power supplies



The large capacitive touchscreen is the central operating element. Lightly tapping a numerical value brings up a virtual keyboard to enter the desired value. Alternatively, voltage, current and limits for the various protection functions can be set using the rotary knob.



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