

R&S®NGL200

vs GW INSTEK PPH-1503/1503D



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 6 ½ 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	GW INSTEK PPH-1503/1503D
Number of channels	1 / 2	1 / 2
Output voltage per channel	0 V to 20 V	0 V to 15 V (channel 2: 12 V)
Max. output power per channel	60 W	45 W
Max. output current per channel	≤ 6 V output voltage: 6 A > 6 V output voltage: 3 A	≤ 9 V output voltage: 5 A > 9 V output voltage: 3 A
Max. sink current per channel	3 A	2 A / 3.5 A
Voltage ripple and noise (20 Hz to 20 MHz)	< 500 μV (RMS) < 2 mV (peak-to-peak)	< 1 mV (RMS) < 8 mV (peak-to-peak)
Current ripple and noise (20 Hz to 20 MHz)	< 1 mA (RMS)	N/A
Load recovery time (20 mV)	< 30 μs	< 80 μs
Programming resolution	1 mV / 0.1 mA	2.5 mV / 1.25 mA
Readback resolution	10 μV / 10 μA	1 mV / 100 μA
Readback accuracy, voltage	< 0.02 % + 2 mV	< 0.05 % + 3 mV
Readback accuracy, current	< 0.05 % + 250 μA	5 A range: < 0.2 % + 400 μA 5 mA range: < 0.2 % + 1 μA
Protection functions	OCP / OVP / OPP / OTP	OCP / OVP / OTP
Arbitrary (min. step)	QuickArb (1 ms)	sequence function (1 ms)
Remote control interfaces	standard: USB / LAN optional: WLAN / IEEE-488 (GPIB)	standard: USB / LAN / IEEE-488 (GPIB)
Display	5" 800 x 480 WVGA cap. touchscr.	3.5" TFT LCD display
Dimensions, W x H x D	222 mm x 97 mm x 436 mm	222 mm x 86 mm x 363 mm
Weight	7.1 kg / 7.3 kg	approx. 4.2 kg / 4.5 kg

R&S®NGL200 series and GW INSTEK PPH-1500 series



R&S®NGL200 series

- 2 instruments, 1 or 2 channels
- Power: 60 W per channel
- Output voltage: 0 V to 20 V per channel

GW INSTEK PPH-1500 series

- 4 instruments, 1 or 2 channels
- Power: Ch1: 45 W, Ch2: 18 W or 36 W
- Voltage: Ch1: 0 V to 15 V, Ch2: 0 V to 12 V



R&S®NGL200 series: all channels are equal



R&S®NGL202

- Both channels provide
- 60 W per channel
- 0 V to 20 V output voltage
- Same functionality

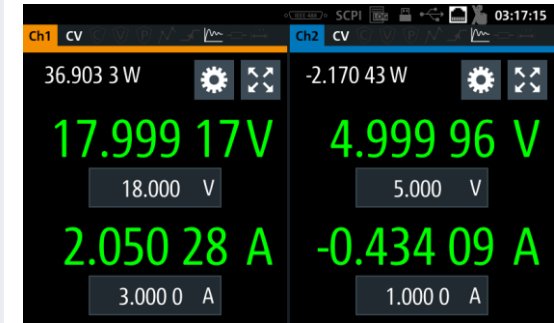
GW INSTEK PPH-1503D

- Channel 1 and 2 are different
- Ch1 provides 45 W power, Ch2 only 18 W
- Ch1 provides 0 V to 15 V, Ch2 only 0 V to 12 V
- Some functions are limited to only one channel



R&S®NGL202 and GW INSTEK PPH-1503D: both instruments have two channels

Source and sink and 6½ digit resolution



A resolution of up to 6½ 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. With its very high resolution of 800 x 480 pixel, the display makes it easy to read the voltage and current fields even at great distances. Additionally, information such as power values or statistics can be displayed. Icons clearly show the status of the set protection or special functions.

