



R&S®NGL202

versus 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	▶ 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
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®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: IEEE-488 (GPIB)	standard: USB / LAN / IEEE-488 (GPIB)
Display	5" 800 x 480 WVGA capacitive touchscreen	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



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

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®NGL200

- 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®NGL200 and GW INSTEK PPH-1503D: both instruments have two channels

Source and 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. 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.