

R&S® NGE100B versus BK9129B



Key features

- ▶ All channels are galvanically isolated and floating
- ▶ All channels are electrically equivalent with the same voltage, current and power
- ▶ Parallel and serial operation
- ▶ Protective functions to safeguard instrument and DUT
- ▶ Tracking and link functions
- ▶ Remote control via USB interface and optional LAN

| 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®NGE100B 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 element for operating the R&S®NGE100B power supply series ▶ Briefly tapping a numeric value displays a virtual keyboard to enter the desired value ▶ With its high resolution of 800 × 480 pixel, the display sets new standards for power supplies |
| Low ripple and noise | ▶ To supply interference-free voltage to sensitive components, 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®NGE100B series enables sink and source operation to simulate batteries and loads |
| 6 ½ digit resolution | ▶ With a resolution of up to 6 ½ digits for voltage, current and power measurement, the R&S®NGE100B series is ideal for characterization of devices with low standby power consumption and high peak currents |

| Parameter | R&S®NGE100B | BK9129B |
|--|--------------------------------|--|
| Number of channels | 2 or 3 | 3 |
| Output voltage per channel | 0 V to 32 V | 0 V to 30 V (channels 1 and 2) 0 V to 5 V (channel 3) |
| Maximum output power | 66 W/100 W | 195 W |
| Maximum output current per channel | 3 A | 3 A |
| Programming resolution | 10 mV/1 mA | 10 mV/1 mA |
| Voltage ripple and noise (20 Hz to 20 MHz) | < 1.5 mV (RMS) | < 1 mV (RMS) |
| Current ripple and noise (20 Hz to 20 MHz) | < 2 mA (RMS) | < 6 mA (RMS) |
| Arbitrary function | EasyArb | no |
| Ramp function | EasyRamp | no |
| Readback resolution | 10 mV/1 mA | 10 mV/1 mA |
| Protection functions | OCP/OVP/OTP | OVP/OTP |
| Remote control interfaces | standard: USB optional: LAN | standard: USB |
| Command processing time | < 30 ms | < 90 ms |
| FuseLink | yes | no |
| Trigger function | yes | no |
| Display | TFT 3.5" QVGA | 14-character display per channel |
| Dimensions (W × H × D) | ½ 19", 2 HU | ½ 19", 2 HU |
| Weight | 5.0 kg | 7.3 kg |



For prices and more information, visit
www.rohde-schwarz.com/product/NGE100B

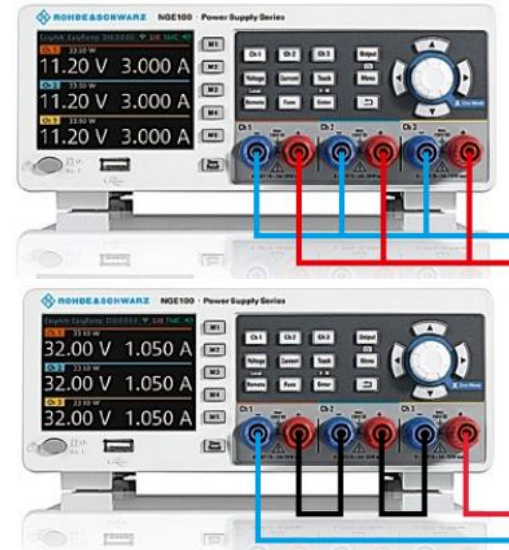
R&S®NGE100 arbitrary function

EasyArb:

- ▶ This function allows the user to program time/voltage or time/current sequences
- ▶ It is also programmable via the external interfaces
- ▶ Up to 128 points possible with a step size of 10 ms

| EasyArb | | | |
|-----------------------|---------|---------|----------|
| EasyArb Mode on Ch 1 | Enabled | | |
| EasyArb Repetition | 1 | | |
| Number of Data Points | 4 | | |
| # | Voltage | Current | Duration |
| 1 | 5.00 V | 0.900 A | 1.00 s |
| 2 | 10.00 V | 0.700 A | 5.00 s |
| 3 | 3.00 V | 1.000 A | 0.03 s |
| 4 | 10.00 V | 0.800 A | 60.00 s |
| Apply EasyArb Data | Apply | | |
| Clear Data Points | Clear | | |

R&S®NGE103B parallel and serial operation



Parallel operation:

- ▶ up to 9 A

Serial operation:

- ▶ up to 96 A

R&S®NGE100 digital trigger in/out (4-bit) option

Digital I/O:

- ▶ R&S®NGE100B power supplies come with an option of a set of digital inputs/outputs (4-bit), which are used independently as trigger inputs or outputs
- ▶ The hardware of the R&S®NGE-K103 option is already installed and the functionality can be activated via a keycode
- ▶ The digital I/O option simplifies integration for production

| Digital IO | | | |
|------------|---------------|-------|-------|
| DIO 1 | DIO 2 | DIO 3 | DIO 4 |
| Direction | Trigger In | | |
| Channel | Ch 1 | | |
| Response | Start EasyArb | | |
| Trigger | Pulse | | |
| Logic | Active High | | |
| Status | Enabled | | |

Advantages of the R&S®NGE100B series over the BK9129B



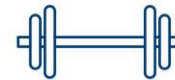
Protection

OCP



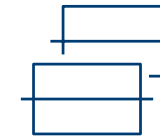
Ramp function

EasyRamp



2.3 kg

Lighter

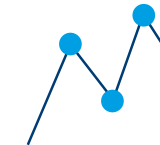


FuseLink



LAN

Interface



Arbitrary function

EasyArb