

ROHDE & SCHWARZ

Make ideas real

R&S®NGC102/103

versus Keysight E36312A



Up to three channels in a universal instrument

One, two or three channels – the R&S®NGC100 power supplies' specifications and wide range of features make them ideal for use in development labs and industrial environments. Even at maximum load, the power supplies remain cool and quiet thanks to their high energy efficiency. Practical interfaces and connectors allow users to work quickly and conveniently with the R&S®NGC100 series – even in 19" racks.

Your benefit	Features
All measured parameters clearly displayed	The brilliant color display shows voltage, current and power values in real time.
Flexible channel configurations for up to 96 V	All channels are galvanically isolated and can be combined to drive balanced circuitries or for higher voltages/currents.
Safe working environment	<ul style="list-style-type: none"> ▶ FuseLink allows you to freely combine the electronic fuses in each channel ▶ A fuse delay can be set to prevent the power supply from switching off prematurely due to a short current spike ▶ Fan speed is automatically adjusted to the load condition, allowing you to work in a quiet environment
Emulate real-world scenarios	Arbitrary waveforms can be generated for voltage and current. This function can be configured and executed via the control panel or an external interface.
Control inrush currents	Increase the output voltage continuously within a timeframe of 10 ms to 10 s with the EasyRamp function.



For prices and more information, visit
www.rohde-schwarz.com/product/NGC100

Parameter	R&S®NGC102/103	Keysight E36312A
Number of channels	2/3 identical channels	2 plus 1 auxiliary channel
Output voltage per channel	0 V to 32 V	2 × 0 V to 25 V, 1 × 0 V to 6 V
Maximum output power	100 W	80 W
Maximum output power per channel	50 W/33 W	2 × 25 W, 1 × 30 W
Maximum output current per channel	5 A/3 A	2 × 1 A, 1 × 5 A
Voltage ripple and noise (20 Hz to 20 MHz)	< 450 µV (RMS), < 4 mV (peak to peak) (meas.)	< 350 µV (RMS), < 2 mV (peak to peak)
Load recovery time	< 1 ms (meas.) (load change: 10 % to 90 %)	< 50 µs (load change: 50 % to 100 %)
Programming resolution	1 mV/0.1 mA	1 mV/1 mA
Readback resolution	1 mV/0.1 mA	1 mV/1 mA
Readback accuracy	< 0.05 % + 2 mV < 0.05 % + 4 mA / < 0.05 % + 2 mA	< 0.04 % + 5 mV < 0.04 % + 3 mA
Protective functions	OPP, OVP, OCP, OTP	OVP, OCP, OTP
Output ramp/arbitrary function	yes/yes	yes/yes
Remote sensing/channel sequencing	yes/yes	yes/yes
Data logging/external trigger	yes/yes	yes/yes
Remote control interfaces	USB and LAN standard, models with IEEE-488 (GPIB)	USB and LAN standard, GPIB optional
Display	3.5"/QVGA	4.3" LCD color display
Dimensions (W × H × D)/weight	222 mm × 97 mm × 291 mm/2.6 kg	216 mm × 145 mm × 367 mm/8.3 kg

R&S®NGC102/103: all channels are equal



R&S®NGC103:

All channels provide

- ▶ 33 W maximum output power
- ▶ 32 V maximum output voltage
- ▶ 3 A maximum output current

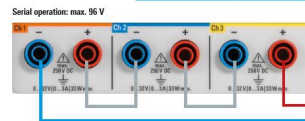
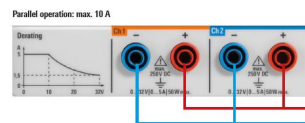


Keysight E36312A:

Channels are different

- ▶ Channel 1: 30 W, channel 2/3: 25 W
- ▶ Channel 1: 6 V, channel 2/3: 25 V
- ▶ Channel 1: 5 A, channel 2/3: 1 A

Parallel and serial operation



R&S®NGC103:

All output channels can be configured in series to achieve higher output voltage, or in parallel for higher output current

Keysight E36312A:

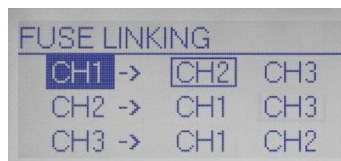
- ▶ Only channels 2 and 3 can be combined in series or in parallel (max. 50 V or max. 2 A)
- ▶ Can be internally configured

Protection functions to safeguard instrument and DUT

Rohde & Schwarz and Keysight offer overvoltage protection, overcurrent protection (electronic fuse) and overtemperature protection; Rohde & Schwarz also offers overpower protection.

Rohde & Schwarz only:

Electronic fuses can be linked logically in any combination.



Example shown in picture:

- ▶ If channel 1 exceeds the maximum current level, then channel 1 and the linked channel 2 will be switched off
- ▶ Channel 3 is not involved because fuse 3 is not linked