



# R&S® NGA101/102

## versus Keysight E36102B/3B/4B



**Linear. Accurate. Affordable.**

The R&S® NGA100 power supplies are linear, compact and easy to use. All models have excellent readback accuracy with a low-current range for demanding measurements. Features such as data logging, arbitrary waveforms, built-in statistics and remote sensing make the instruments ideal for various bench applications. Equipped with a number of different remote interfaces, including USB and Ethernet, the R&S® NGA100 power supplies are also great for automated tests. Advanced protective functions keep devices connected and power supplies safe.

Your benefit	Features
Linear design	The linear design of the output stages allows the R&S® NGA100 power supplies to operate with minimal residual ripple and noise, supplying extremely stable output voltage and current.
FlexPower	The R&S® NGA100 power supplies operate with maximum power at various operating points and cover far more applications than single-range power supplies.
Channel fusion	Activate channel fusion in either serial or parallel mode and the device will act like a single-channel version of itself with double voltage or current capabilities.
Low-current measurement range	IoT devices can have multiple sleep modes where current consumption is very low. To accurately determine these operating states, R&S® NGA100 power supplies have a low-current measurement range.

Parameter	R&S® NGA101/102	Keysight E36102B/E36103B/E36104B		
Number of channels	1 / 2	1		
Output voltage per channel	0 V to 35 V	0 V to 6 V / 20 V / 35 V		
Max. output power	40 W / 80 W	30 W / 40 W / 35 W		
Max. output power per ch.	40 W	30 W / 40 W / 35 W		
Max. output current per ch.	6 A	5 A / 2 A / 1 A		
Programming resolution	1 mV/1 mA	360 µV/300 µA	2 mV/120 µA	2 mV/60 µA
Voltage ripple and noise (20 Hz to 20 MHz)	< 0.5 mV (RMS), < 10 mV (peak to peak)	< 250 µV (RMS) < 30 mV (peak to peak)	< 0.8 mV (RMS) < 15 mV (peak to peak)	< 1.2 mV (RMS) < 20 mV (peak to peak)
Load recovery time	< 100 µs (meas.)	< 50 µs		
Output ramp function	EasyRamp	no		
Arbitrary function	EasyArb	no		
Readback resolution	1 mV/100 µA	240 µV/200 µA	800 µV/80 µA	1.4 mV/40 µA
Readback accuracy	< 0.02 % + 5 mV < 0.03 % + 500 µA	< 0.05 % + 3 mV < 0.05 % + 4 mA	< 0.05 % + 5 mV < 0.05 % + 1 mA	< 0.05 % + 8 mV < 0.05 % + 500 µA
Protective functions	OVP/OCP/OTP/OPP	OVP/OCP		
Remote control interfaces	standard: USB/LAN optional: WLAN	standard: LAN/USB		
Data logging	10 sample/s	5 sample/s		
Display	TFT 3.5" QVGA	4.3" LCD color display		
Dimensions (W × H × D)	362 mm × 100 mm × 451 mm	102 mm × 106 mm × 365 mm		
Weight	6.6 kg / 7.0 kg	3.7 kg / 3.7 kg / 3.6 kg		



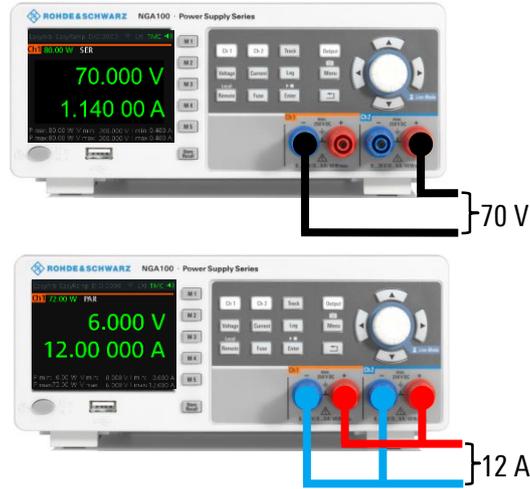
## R&S®NGA102 channel fusion

### R&S®NGA102 channel fusion

- ▶ Activating channel fusion in either serial or parallel mode
- ▶ The device will act like a single-channel version of itself
- ▶ In serial mode, the outputs are connected internally
- ▶ The parallel mode requires external wiring

Maximum voltage in serial mode: 70 V

Maximum current in parallel mode: 12 A

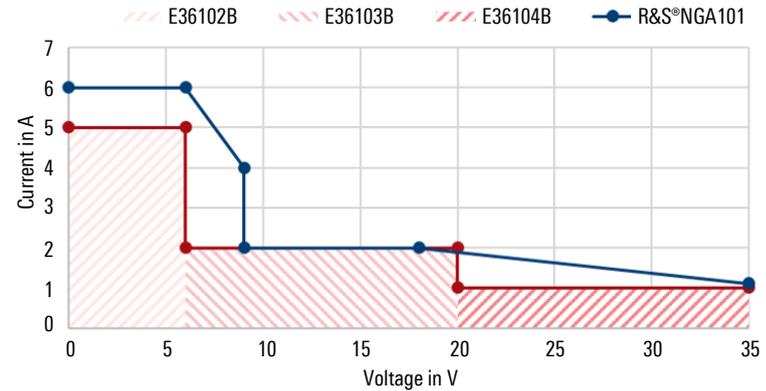


## R&S®NGA100 FlexPower

### R&S®NGA101 output curve

The R&S®NGA101 covers more applications than the Keysight E36102B, E36103B and E36104B combined

#### R&S®NGA101 versus Keysight E36102B/3B/4B



## Advantages of the R&S®NGA101/102 over the Keysight E36102B/3B/4B

**EasyRamp**  
10 ms to 10 s

**Higher accuracy**

**2 times**  
More outputs

**Digital I/O**  
optional

**EasyArb**  
dwell time as low as 10 ms

**2 times**  
Faster data logger

**FlexPower**  
more operating points

**Wi-Fi**  
optional