



# R&S® NGA141/142 versus Keysight E36105B/E36106B



## 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® NGA141/142	Keysight E36105B/E36106B	
Number of channels	1 / 2	1	
Output voltage per channel	0 V to 100 V	0 V to 60 V / 100 V	
Max. output power	40 W / 80 W	36 W / 40 W	
Max. output power per ch.	40 W	36 W / 40 W	
Max. output current per ch.	2 A	0.6 A / 0.4 A	
Programming resolution	1 mV/1 mA	3.6 mV/36 µA	6 mV/24 µA
Voltage ripple and noise (20 Hz to 20 MHz)	< 1.5 mV (RMS), < 20 mV (peak to peak)	< 1.55 mV (RMS) < 30 mV (peak to peak)	< 2.5 mV (RMS) < 40 mV (peak to peak)
Load recovery time	< 50 µs (meas.)	< 50 µs	
Output ramp function	EasyRamp	no	
Arbitrary function	EasyArb	no	
Readback resolution	1 mV/100 µA	2.4 mV/24 µA	4 mV/16 µA
Readback accuracy	< 0.02 % + 10 mV < 0.03 % + 500 µA	< 0.05 % + 12 mV < 0.05 % + 300 µA	< 0.05 % + 20 mV < 0.05 % + 300 µA
Protective functions	OVP/OC/OTP/OPP	OVP/OC/OTP	
Remote control interfaces	standard: USB/LAN	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	6.9 kg / 7.3 kg	3.6 kg	



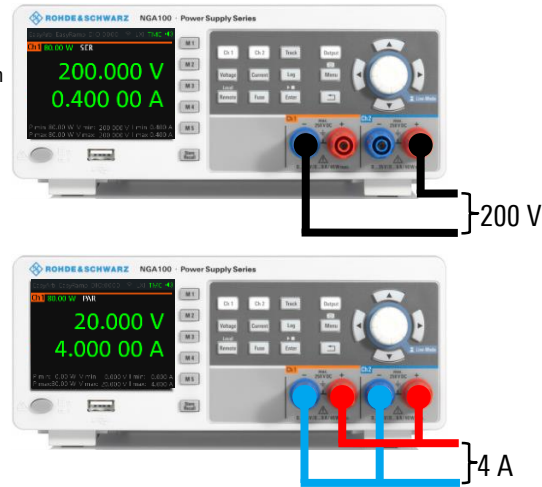
## R&S®NGA142 channel fusion

### R&S®NGA142 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: 200 V

Maximum current in parallel mode: 4 A

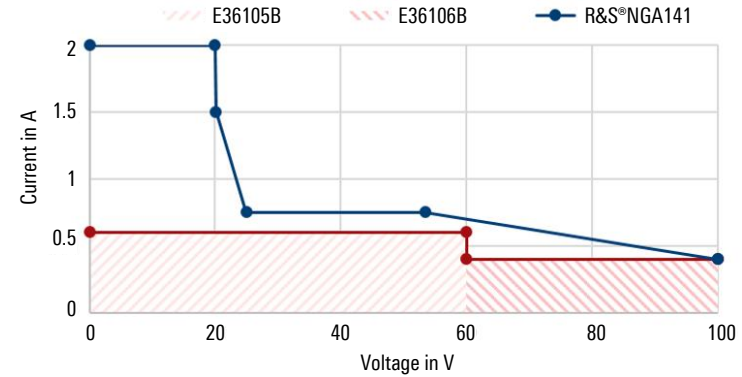


## R&S®NGA100 FlexPower

### R&S®NGA141 output curve

The R&S®NGA141 covers more applications than the Keysight E36105B and E36106B combined

#### R&S®NGA141 versus Keysight E36105B/6B



## Advantages of the R&S®NGA141/142 over the Keysight E36105B/E36106B

**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  
Sample/s

**FlexPower**  
more operating points  
 $P_{max}$