

ROHDE & SCHWARZ

Make ideas real

R&S®NGU411

versus Keysight B2901BL



What sets this source measure unit apart?

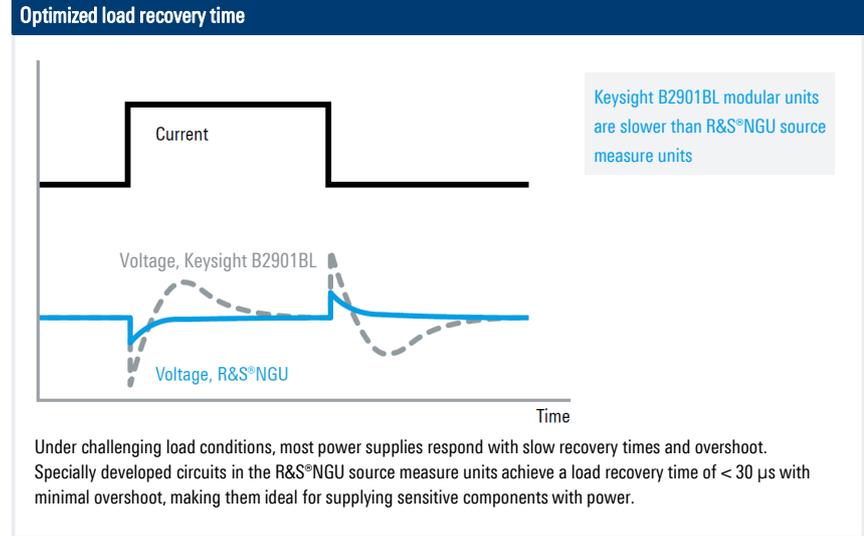
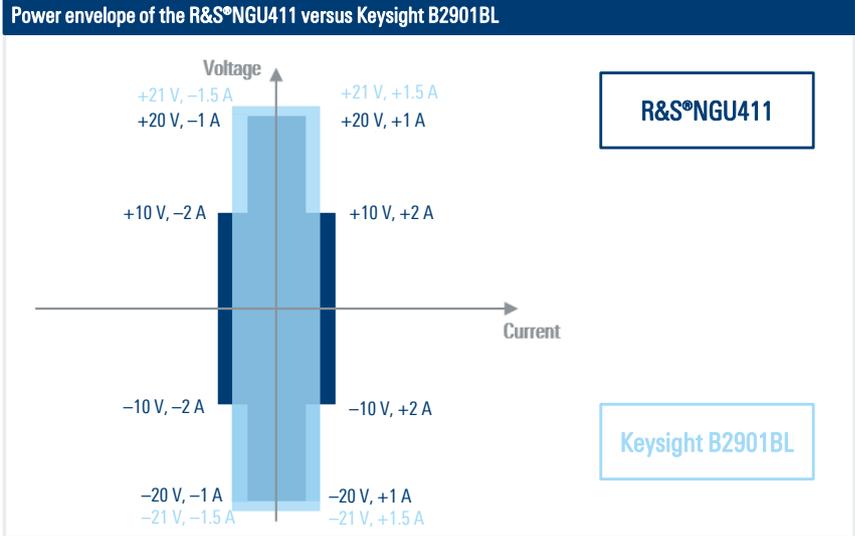
- ▶ Minimal residual ripple and noise to supply interference-free voltage to sensitive DUTs
- ▶ Fast regulation of output voltage with minimal overshoot and very fast load recovery time
- ▶ Acquisition rate of up to 500 ksamples/s to capture extremely fast variations in voltage and current
- ▶ Voltage priority and current priority mode
- ▶ High-capacitance mode
- ▶ Modulation input

| Your benefit | Features |
|--|---|
| Minimal overshoot from abrupt load changes | <ul style="list-style-type: none"> ▶ Optimized load recovery time of < 30 μs ▶ Handles abrupt load changes from a few nA to the ampere range without creating voltage drops or overshoots |
| Capture fast variations in voltage/current | <ul style="list-style-type: none"> ▶ Acquisition rate of up to 500 ksamples/s ▶ Voltage and current results available every 2 μs |
| Supply positive and negative voltages and currents | <ul style="list-style-type: none"> ▶ Four-quadrant operation allows the R&S®NGU411 to act as a source or sink for both polarities. This enables tasks such as measuring the forward and reverse characteristics of semiconductor devices in a single test operation without having to make changes to the circuit. |
| Can act as an AC source | <ul style="list-style-type: none"> ▶ The R&S®NGU411 source measure unit provides a modulation input to connect e.g. an arbitrary generator. The output follows the modulation input signal, enabling the instrument to act as an AC source and be used to simulate glitches and unstable conditions. |

| Parameter | R&S®NGU411 | Keysight B2901BL |
|---|---------------------------------|-------------------------------------|
| Max. voltage/current/power | ± 20 V/2 A/20 W | ± 21 V/1.5 A/31.8 W |
| Voltage ripple and noise (RMS) | < 500 μ V (meas.) | noise: < 3 mV; ripple not specified |
| Current ripple and noise (RMS) | < 1 mA (meas.) | not specified |
| Load recovery time | < 30 μ s (meas.) | < 80 μ s |
| Rise time/fall time | < 100 μ s / < 100 μ s | not specified |
| Measurement functions | voltage, current, power, energy | voltage, current, resistance |
| Measured voltage/current ranges | 2/5 | 3/8 |
| Max. readback resolution | 1 μ V/100 pA | 100 nV/1 pA |
| Max. voltage readback accuracy | < 0.025 % + 100 μ V | < 0.015 % + 225 μ V |
| Max. current readback accuracy | < 0.025 % + 15 nA | < 0.025 % + 500 pA |
| Max. acquisition rate (min. step) | 500 ksamples/s (2 μ s) | 5 ksamples/s (200 μ s) |
| Arbitrary function (min. step) | QuickArb (100 μ s) | sweep (200 μ s) |
| Protective functions | OVP, OCP, OPP, OTP | OTP |
| Digital I/O | optional | yes |
| High-capacitance mode (maximum capacitance) | yes (470 μ F) | yes (50 μ F) |
| Current priority mode | yes | no |
| Modulation input | yes | no |



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



Modulation input

Modulation input

Keysight B2901BL modular units do not provide a modulation input

The R&S[®]NGU411 source measure unit provides a modulation input to connect e.g. an arbitrary generator. The output follows the modulation input signal, enabling the instrument to act as an AC source and be used to simulate glitches and unstable conditions.

Advantages of the R&S[®]NGU411 over the Keysight B2901BL

- QuickArb**: 2048 points per cycle
- Modulation input**
- EasyRamp**: 10 ms to 10 s
- Remote sensing**
- Lower noise**
- Sample/s**
- 100 x faster acquisition time**