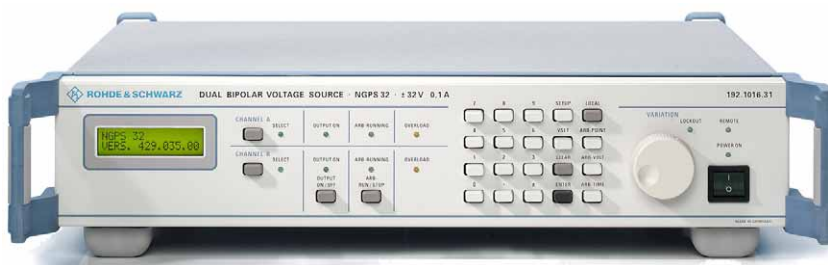


# Programmable Voltage Source R&S NGPS32

2 x –32 V to +32 V, max. 100 mA,

500  $\mu$ V resolution

Photo 43862-1



## Brief description

The R&S NGPS32 is a programmable voltage source with two isolated identical outputs. The bipolar output voltages (–32 V to +32 V) can be set with high resolution either manually or via the IEEE488 interface. Two integrated simple arbitrary generators allow independent output of low-frequency waveforms. The R&S NGPS32 is suitable for use in automatic calibration and adjustment systems and as a reference voltage source in control processes.

## Main features

- ◆ 2 x –32 V to +32 V with 500  $\mu$ V resolution
- ◆ Selectable current limit (100mA or 10mA)
- ◆ Two integrated simple arbitrary generators
- ◆ High thermal and long-term stability
- ◆ Floating output voltages, combinable as required
- ◆ Rear outputs with additional sensing connectors
- ◆ Ease of operation

In addition to static voltage values, low-frequency waveforms can be output. For this purpose, reference points (consisting of voltage value and time) can be entered manually or via IEC/IEEE bus. Between two neighbouring points, the arbitrary generator operates like a ramp generator, i.e. the programmed voltage difference is sampled as a ramp with the time T of the preceding point. The step size of the ramp is calculated automatically. The arbitrary generator can output the waveform only once or cyclically. The reference points are stored in a nonvolatile memory.

## Specifications in brief

<b>Outputs</b>	2 isolated, floating channels with rear outputs on terminal strip
Output voltage (per channel)	–32.7675 V to 32.7675 V in 131071 steps
Setting	via decimal keypad, rotary knob or IEEE488 bus
Setting resolution	500 $\mu$ V
Deviation of full scale	$\pm 2$ mV
Display	alphanumeric LCD display with 2 lines and 16 characters/line with adjustable LED lighting
Output current	selectable current limit 10 mA or 100 mA, short-circuit-proof
Accuracy of current limit	$\pm 25\%$
Voltage deviation with AC supply variation of $\pm 10\%$	$\pm 10$ ppm
Voltage deviation with temperature variation from 0° C to +40° C	$\pm 10$ ppm/°C
Instability	$\pm 1$ ppm/h
Ripple and noise (20 Hz to 1 MHz)	<500 $\mu$ V
Nonlinearity	<500 $\mu$ V
Settling time	<700 $\mu$ s over full output voltage range <100 $\mu$ s for smallest programming step (500 $\mu$ V)
Sensing voltage compensation	max. 250 mV per output line

### Arbitrary generator

Programming range	–32.7675 V to 32.7675 V in 500 $\mu$ V steps
Max. number of reference points	200
Smallest time interval between 2 reference points	1 ms
Largest time interval between 2 reference points	32767 ms
Operating temperature range	0° C to +40° C
AC supply	100/120/220/240 V $\pm 10\%$ , 50 Hz to 60 Hz; 62.5 VA
Dimensions (W x H x D)	465 mm x 110 mm x 400 mm
Weight	6.75 kg

## Ordering information

<b>Dual Programmable Voltage Source (bipolar) with arbitrary function</b>	R&S NGPS32	0192.1016.31
<b>Options</b>		
19" Rack Adapter 2 HU	R&S ZZA-211	1096.3260.00