

Pocket Calibrator DIGISTANT®

Voltage/current calibrator

Model 4411

Code:	4411 EN
Delivery:	ex stock/4 weeks
Warranty:	24 months



- Voltage range: 10 μ V to 30.00 V
- Current range: 1 μ A to 24.000 mA
- Both signal source or measurement functions
- 20 mA SINK function
- Easy to use
- Ramp function

4411 EN

Application

The DIGISTANT® model 4411 is capable as a small manageable checking and calibration device for process technology in field.

The other applications in the metrology include e.g. the calibration of indication instruments, recorders, the checking of amplifiers, transducers and so on...

The interests of the control technology were included particularly. The direct calibration data entry by UP/DOWN keys, the use of ramp functions, simplifier the management of measurement tasks.

The function SINK can simulate a 2 wire transducer in a current loop.

Both current and voltage can be generated or measured.

Description

The operation is made by UP/DOWN keys for each digit, measuring range and measuring functions are activated by rotary switches and/or slide switches.

The DIGISTANT® 4411 generates and measures voltages up to 30 V DC and currents up to 24 mA DC.

The output level can be changed up and down between 4, 8, 12, 16 and 20 mA signals by one touch for the "4-20 mA" output, and between 1, 2, 3, 4 and 5 V DC signals for the "1 ... 5 V" output, for efficient calibration work.

The "20 mA SINK" function absorbs a current adjustable from 0.1 ... 24 mA in a LOOP with a voltage from 5 ... 28 V DC.

The "ramp function" increases and decreases the output level to the preset level at a constant rate for the selected sweep time (16 or 32 seconds).

Technical Data

Source Functions

Accuracy = ± (% of setting + value in mV, µV or µA) at 23 ± 5 °C for 1 year

Range Selection	Range of generated signal	Accuracy	Resolution	Remarks
30 V	0 to 30.00 V	0.05 % + 20 mV	10 mV	I max: 1 mA
10 V	0 to 11.000 V	0.05 % + 2 mV	1 mV	I max: 10 mA
<1 - 5 V>	1/2/3/4/5 V	0.05 % + 2 mV	1 V Step	I max: 10 mA
1 V	0 to 1.1000 V	0.05 % + 0.2 mV **	0.1 mV	I max: 10 mA
100 mV	0 to 110.00 mV	0.05 % + 50 µV **	0.01 mV	I max: 10 mA
20 mA *	0 to 24.000 mA	0.05 % + 4 µA	0.001 mA	max. load: 12 V
24 V (20 mA)*	24 V	± 10 %	-	I max: 22 mA
<4 - 20 mA> *	4/8/12/16/20 mA	0.05 % + 4 µA	4 mA Step	max. load: 12 V
20 mA SINK*	0.1 to 24.000 mA	0.1 % + 4 µA	0.001 mA	external power supply: 5 to 28 V

Temperature effect: 1/10 of accuracy/°C, however, for 100 mV range, 0.005 % + 10 µV/°C

* The display resolution can be selected at 24.000 or 24.00 displays by DIP switch.

** Load ≥ 1kΩ

Measurement Functions

Accuracy = ± (% of reading + value in the last significant digit), at 23 ± 5 °C for 1 year

Range selection	Indication	Accuracy	Resolution	Remarks
30 V	0 to ± 30 V DC	0.05 % + 2 digits	10 mV	Impedance: approx. 1 MΩ
10 V	0 to ± 11.000 V DC	0.05 % + 2 digits	1 mV	Impedance: approx. 1 MΩ
1 V	0 to ± 1.1000 V DC	0.05 % + 2 digits	0.1 mV	Impedance: approx. 1 MΩ
100 mV	0 to ± 110.00 mV	0.05 % + 7 digits	0.01 mV	Impedance: approx. 1 MΩ
20 mA	0 to ± 24.00 mA DC	0.05 % + 1 digits	0.01 mA	Impedance: approx. 45 Ω

Power supply:	4 x 1.5 V alkaline batteries or dedicated AC adapter
Life of batteries:	approx. 50 hours for 5 VDC output with a load of 10 kΩ or greater approx. 25 hours for 20 mA output with load of 5 V applies for use with alkaline batteries
Level setting:	by four-digit up/down keys
Response of generator:	approx. 1 second
Load conditions:	< 100 µH for 20 mA; 0,1 µF for other ranges
Measurement period:	approx. 1/second
Display:	5 digit, 7 segment LCD
Max. voltage:	30 VDC peak between each terminal to ground
Operating temperature:	0 ... 50 °C, 20 ... 80 % RH non condensing
Storage temperature:	- 20 ... 50 °C, 90 % RH or less non condensing
Dimensions (H x W x D):	approx. 192 x 92 x 42 [mm]
Weight:	ca. 440 g

Order Information

Voltage/current calibrator with carrying case, lead cable, test certificate and battery

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Accessories (not included)

1 external AC adapter (220-240 V) 8 V DC / 150 mA

Model 4411-Z001

DKD / WKS Calibration Certificate

For the calibrator DIGISTANT® model 4411 we are offering a DKD Calibration Certificate / Manufacturer Calibration Certificate.

The instrument is calibrated with current/voltage in the functions source or/and measurement at 30 measurement points.

Model 44DKD-4111G
Model 44DKD-4111GM
Model 44WKS-4411G
Model 44WKS-4411GM

Example of Application

Easy setting of every digits by UP/DOWN buttons

Simulation of a 2-wire pressure transmitter in a current loop

This is an example of connecting the DIGISTANT® 4411 to a distributor for two-wire transmitter. The 4411 can absorb up to 5 V to 28 V DC supplied from the distributor and generates a 0.1 - 24 mA output allowing loop check.