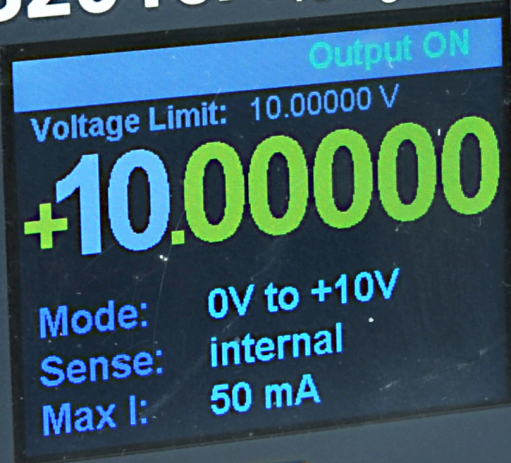




VS2010A Precision Voltage Source



Output ON
Voltage Limit: 10.00000 V
+10.000000
Mode: 0V to +10V
Sense: internal
Max I: 50 mA



Menu

Output

+ Source

+ Sense

Gnd

Exit

OK /
Select

VS2010A Precision Voltage Source

Some measurements within the precision metrology field require an extremely stable and noise free voltage reference. The wekomm VS2010A is the very instrument for such applications.

This instrument supplies an extremely stable and extremely low noise DC Voltage, programmable between -10V and +10V. All voltage settings have an effective resolution of 10 μ V, so in respect to the full range of 10V the VS2010A provides an effective resolution of 1ppm or 1 μ V/V. Due to the use of a very high-quality DAC and an excellent reference source, the linearity error is kept below 1 μ V/V. For greater precision, the instrument can be adjusted for every 1V Volt step to minimize this error even further.

A high precision reference source with proven layout and components makes the base for an instrument providing best of its class performance. The VS2010 features stability and precision of voltage output which is unrivalled by the best calibrators on the market. This makes the VS2010 an affordable and cost-effective solution, where a precise voltage source is needed.

With the external sensor connections, the user can ensure that the preset voltages are present at the place where they are needed. The high-power option offers the capability to deliver this performance at up to 500mA. A SCPI interface available via USB makes the instrument the perfect companion in any automated test environment where the highest possible precision in pure DC only combined with maximum flexibility is needed.

The VS2010A is the ideal choice for any metrology requirements where a precise power supply is needed. Noise and linearity errors are so low that they match or supersede the performance of the most precise multi-meters on the market. This is important, as a true metrology application is made to measure the device under test and keep the error, the measurement instruments themselves contribute, at least one or two magnitudes lower as the expected measurement result.

The wekomm VS2010A allows two instruments to be mounted side by side in one single 19" rack so the setup can be space saving. With remote control capabilities, the instrument is fully suited for any integrated test equipment. If the remote capabilities are not used, all functions of the Voltage Source can be accessed and controlled via the user-friendly menu, which is displayed on a bright 2.4" LCD display

Instrument Specifications

Display

Type:	LCD 2.4" color display
Resolution:	320 x 280 pixel

Connectors

Front:	Voltage output, Sense, Gnd, Earth
Rear:	Line, USB Type B

Data Access / Remote

SCPI:	via USB
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Power Supply

Line Voltage:	240V AC or 115V AC, manual setting
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Dimensions and Weight

Weight:	3 kg
Length:	35 cm
Width:	22,5 cm (w/o handle)
Height:	7,5 cm (w/o feet)

Available Options

Sense Terminals:	switchable
High Power:	max 500mA current, max power setting available



Output Specifications

preliminary

DC Output

Range	0V to +10V or -10V to +10V, 10 μ V resolution 0V to +1V or -1V to +1V, 1 μ V resolution
Accuracy of output voltage	better 1 μ V/V

Stability

Reference Voltage	better 2 μ V/V/year, typ. 0.5 μ V/V/year
24h	better 1 μ V/V
90d	better 1.5 μ V/V
1y	better 2 μ V/V

Linearity

Range 0V - 10V:	better 1 μ V/V
Range -10V - 10V:	better 1 μ V/V