PeakTech®

Unser Wert ist messbar...

PeakTech® 6225 A / 6226

Bedienungsanleitung / Operation Manual

Labor-Schaltnetzgerät /
Laboratory Switching Mode Power Supply

1. Safety Precautions

This product complies with the requirements of the following directives of the European Union for CE conformity: 2014/30/EU (electromagnetic compatibility), 2014/35/EU (low voltage), 2011/65/EU (RoHS).

To ensure safe operation of the equipment and eliminate the danger of serious injury due to short-circuits (arcing), the following safety precautions must be observed.

Damages resulting from failure to observe these safety precautions are exempt from any legal claims whatever.

* Do not use this instrument for high-energy industrial installation measurement.
* Connect the mains plug of the equipment only to a mains outlet with earth connection.
* The instrument must be set up so that the power plug can be removed from the socket easily.
* Prior to connection of the equipment to the mains outlet, check that the available mains voltage corresponds to the voltage setting of the equipment.
* Do not place the equipment on damp or wet surfaces.
* Do not cover the ventilation slots of the cabinet to ensure that the air is able to circulate freely inside.
* Do not insert metal objects into the equipment by way of the ventilation slots.
* Do not place water filled containers on the equipment (danger of short-circuit in case of knock over of the container).
* Replace a defective fuse only with a fuse of the original rating. Never short-circuit fuse or fuse holding.
* Check test leads and probes for faulty insulation or bare wires before connection to the equipment.
* Never touch the tips of the test leads or probe.
* Comply with the warning labels and other info on the equipment.
* Do not subject the equipment to direct sunlight or extreme temperatures, humidity or dampness.
* Do not subject the equipment to shocks or strong vibrations.
* Do not operate the equipment near strong magnetic fields (motors, transformers etc.).
* Keep hot soldering irons or guns away from the equipment.
* Allow the equipment to stabilize at room temperature before taking up measurement (important for exact measurements).
* Periodically wipe the cabinet with a damp cloth and mid detergent. Do not use abrasives or solvents.
* The device is suitable for indoor use only
* Do not operate the meter before the cabinet has been closed and screwed safely as terminal can carry voltage.
* Do not store the meter in a place of explosive, inflammable substances.
* Do not modify the equipment in any way
* Do not place the equipment face-down on any table or work bench to prevent damaging the controls at the front.
* Opening the equipment and service – and repair work must only be performed by qualified service personnel
* Laboratory power supplies are no battery chargers and do not have a special protection against reverse voltage and false polarity. Do not use for charging batteries!
* Do not operate the device to power inductive loads, such as electric motors, which act as a generator during overrun and thus can produce a reverse voltage!
* **Measuring instruments don’t belong to children hands-**

Cleaning the cabinet
Prior to cleaning the cabinet, withdraw the mains plug from the power outlet. Clean only with a damp, soft cloth and a commercially available mild household cleanser. Ensure that no water gets inside the equipment to prevent possible shorts and damage to the equipment.

2. Introduction

This switching power supply in modern design has been designed specifically for the service and education sectors. The four-digit LED display allows fast and accurate reading of the set values. The output voltage and current limit are hereby continuously in coarse and fine adjustment variable.

- Modern laboratory power supply in switch mode power supply technology
- 4-digit LED display for current and voltage
- Voltage and current preset
- output on and off
- Coarse (1V / 100mA) and fine adjustment (10mV / 1mA)
- Temperature-controlled fan
- constant current and short circuit protection
- 4mm safety sockets

3. Technical Data

Operation voltage:	115 / 240 V AC (+/- 10%); 50/60 Hz switchable extern
Protection:	constant current and short-circuit protection
Display:	2 x 4-Digits blue LED (7-Segment)
Safety:	Protection Class 1; EN-61010-1
Dimensions:	(WxHxD) 80 x 160 x 260 mm
Weight:	1,5 kg
Accessories:	Power cable and manual

PeakTech 6225A:

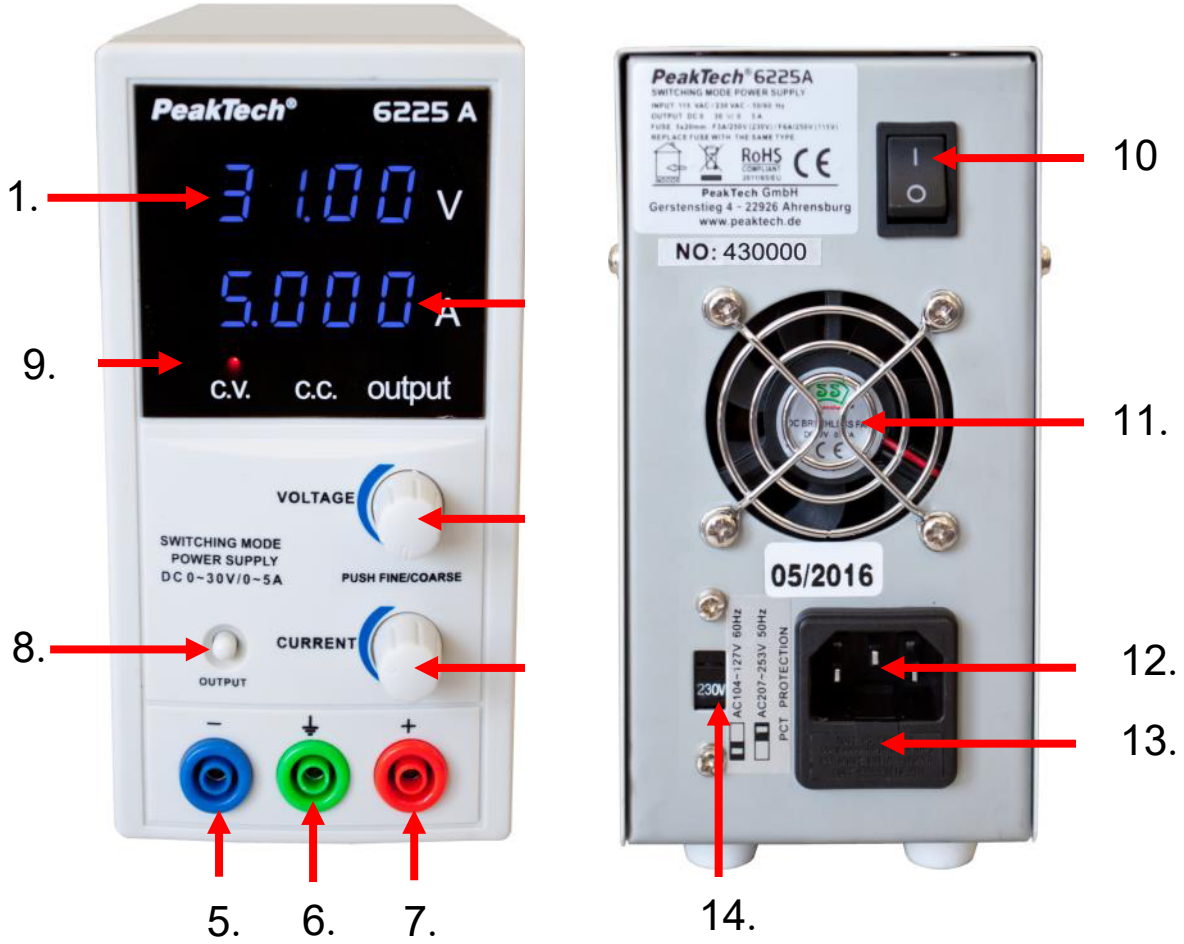
Output voltage:	0 ~ 30 V DC	
Output current:	0 ~ 5 A DC	
Line regulation:	≤ 0,01% ± 1 mV	≤ 0,2% ± 1 mA
Load regulation:	≤ 0,01% ± 5 mV	≤ 0,2% ± 5 mA
Ripple and noise:	≤ 3 mV rms	≤ 3 mA rms
Voltage indication accuracy:	± 0,5 % + 10 digits	
Current indication accuracy:	± 1,5 % + 25 digits	

PeakTech 6226:

Output voltage:	0 ~ 30 V DC	
Output current:	0 ~ 10 A DC	
Line regulation:	≤ 0,02% ± 5 mV	≤ 0,2% ± 1 mA
Load regulation:	≤ 0,02% ± 10 mV	≤ 0,5% ± 10 mA
Ripple and noise:	≤ 10 mV rms	≤ 10 mA rms
Voltage display:	± 0,5 % + 10 digits	
Current display (<5A):	± 1,5 % + 25 digits	
Current display (≥5A):	± 1,0 % + 5 digits	

4. Operation

4.1. Controls and description of front-panel



Front :

1. Voltage indication
2. Current indication
3. Coarse / Fine adjustment of output voltage
4. Coarse / Fine adjustment of current
5. Negative output terminal
6. GND-Output
7. Positive output terminal
8. Output ON/OFF switch
9. C.V. / C.C. and Output Indication

Rear :

10. ON/OFF Switch
11. Fan
12. Mains Socket
13. Fuse Holder
14. Voltage Selector

5. Operating method

1. **Setting the constant voltage output:**
   Set the desired output voltage with the voltage knob (3). Press on the voltage knob, to select the desired digital point for coarse or fine adjustment. Once the desired voltage is set, turn on the output with the Output button (8). The C.V. and Output-LED indicates the voltage output.

2. **Current limitation / constant current output:**
   Set the desired current limitation when output is off with the current knob (4). Press the current knob to select the desired digital point for coarse or fine adjustment. Once the desired current is set, turn on the output with the Output button (8). The C.C. and output LEDs indicate an active current limitation.

   Note:
   The maximum output current is determined by the connected load. You can't charge a connected consumer with a higher power than it actually needs.

   PeakTech 6226: In current setting values under 9.9 A, the display will show X**.**XXX (1 mA resolution); when setting value reach or over 9.9 A, the display will show XX**.**XX (10mA resolution).

3. **Activate / deactivate key lock:**
   Once you have adjusted the desired settings, press and hold the voltage and current controls for 3 seconds to activate a key lock. Now only the output button is operable, but the voltage and current control can't be changed. Press both buttons again for 3 seconds to disable the key lock

6. Note

1. If the power supply cannot be turned on and the mains supply is turned on, the fuse of the laboratory power supply maybe triggered. Turn on the laboratory power supply, unplug the power cord and replace the fuse.
   Does the replacement of the fuse is not successful, maybe a defective in the device can be present. Consult your dealer to carry out an inspection.

2. If the output voltage in constant voltage mode is lower than the preset voltage and the CC indicator lights, the power supply has automatically switched to the constant current mode. Check the connected load or increase the output current.

3. If the output current in constant current mode is lower than the preset current and the CV indicator lights, the power supply has automatically switched to the constant voltage mode. Check the connected load or increase the output voltage.

4. If the output voltage in constant voltage operation is not stable or jumps, it is probably the mains supply voltage drops below 90% of the rated value. If the problem is not caused by the mains supply voltage, contact your dealer.

7. Caution !

The mains power must be switched off before servicing and servicing should be referred to a qualified person. The unit should be stored in a dry and well ventilated place and the power cord removed if storing for long periods.

Laboratory Power Supplies are not designed for charging batteries. Any use of this type can cause serious damage to the device, which are exempt from any legal claims whatever.

Do not operate the device to power inductive loads, such as electric motors, which act as generator during overrun and thus can produce a reverse voltage.

Replace fuse only with an identical fuse.

This manual considers the latest technical knowing. Technical changings which are in the interest of progress reserved.

We herewith confirm, that the units are calibrated by the factory according to the specifications as per the technical specifications.

We recommend to calibrate the unit again, after one year.

PeakTech Prüf- und Messtechnik GmbH – Gerstenstieg 4 – DE-22926 Ahrensburg / Germany

☎+49-(0) 4102-97398 80 +49-(0) 4102-97398 99

info@peaktech.de www.peaktech.de