

# PeakTech®

Unser Wert ist messbar...



**PeakTech® 6080 A**

**Bedienungsanleitung / operation  
manual**

**DC Labornetzgerät / Power Supply**

## **1. Safety Precautions**

This product complies with the requirements of the following European Community Directives: 2014/130/EU (Electromagnetic Compatibility) and 2014/35/EU (Low Voltage) as amended by 2014/32/EU (CE-Marking).

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.

- \* Use protection class I devices only with grounded wall outlets to keep the protection class.
- \* The device must be installed in such a way that the mains plug can be easily removed from the socket.
- \* Do not place the equipment on damp or wet surfaces.
- \* This device is passively cooled by a backside heat sink, which can get very hot. After use, allow the unit to cool before handling the heat sink.
- \* 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.
- \* Comply with the warning labels and other info on the equipment.
- \* The measurement instrument is not to be operated unattended.
- \* Do not subject the equipment to direct sunlight or extreme temperatures, humidity or dampness.
- \* Do not subject the equipment to shocks or strong vibrations.
- \* 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 mild 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
- \* Opening the equipment and service – and repair work must only be performed by qualified service personnel
- \* Reverse voltages in the power supply unit should be avoided - do not use to charge batteries or to operate voltage generating, inductive loads.
- \* **-Operate electronic devices under the supervision of qualified personnel!**

### **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**

Our PeakTech 6080 A laboratory power supply is a linear-regulated power supply with safety isolating transformer according to EN-61558. The (primary side) mains input voltage is galvanically separated from the (secondary side) DC output voltage by this transformer, which has no relation to the earth potential.

This model has a maximum output voltage of 15 V DC and outputs a so-called SELV safety extra-low voltage.

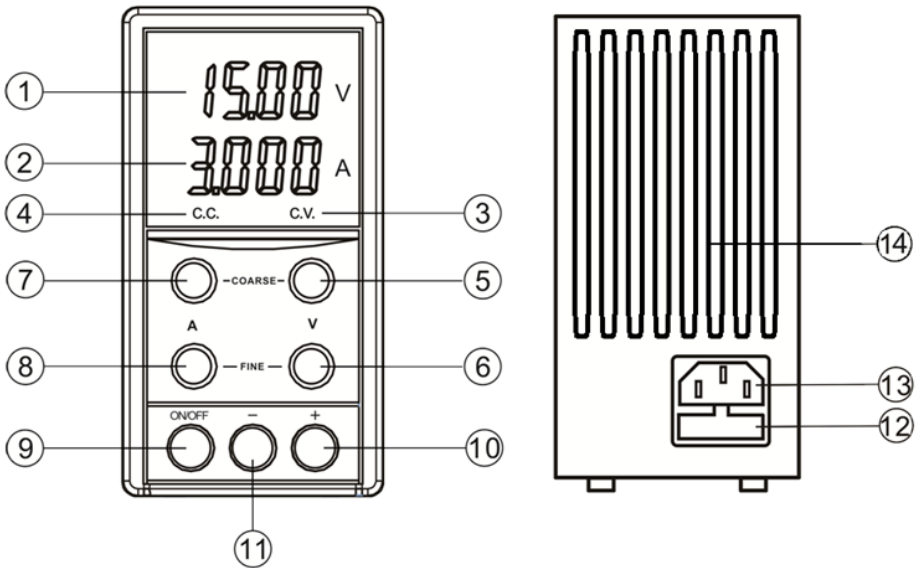
The metal housing is earthed and complies with protection class I, whereby the output side voltage corresponds to a protection class III environment due to the galvanic isolation.

This device is passively cooled and therefore has an external heat sink on the back of the device.

## **3. Technical Data**

Operation voltage	104~127V AC (60Hz), 207~253V AC (50Hz)	
Output voltage	0 - 15 V DC	
Output current	0- 3 A DC	
Line regulation (0-100% Load)	CV $\leq$ 0.01%+1mV	CC $\leq$ 0.2%+1mA
Load regulation (0-100% Load)	CV $\leq$ 0.01%+3mV	CC $\leq$ 0.2%+3mA
Ripple and noise (0-100% Load)	CV $\leq$ 0.5mVr.m.s	CC $\leq$ 3mAr.m.s
Protection	constant current and short-circuit protection	
Accuracy		
Voltage indication	$\pm$ 0,5% +5 digits	
Current indication	$\pm$ 0,5% +5 digits	
Dimensions (Wx H x D)	80 x 160 x 225 mm	
Weight	2 kg	
Accessories	Power cable and manual	
Operating Temperature	0 ... 40°C	
Operating Humidity	< 90% R.H.	

## 4. Controls and description of front-panel



- (1) Voltage Display
- (2) Current Display
- (3) Constant Voltage (C.V.) Display
- (4) Constant Current (C.C.) Display
- (5) Coarse Adjustment for Voltage
- (6) Fine Adjustment for Voltage
- (7) Coarse Adjustment for Current
- (8) Fine Adjustment for Current
- (9) On/Off switch
- (10) Plus- Socket
- (11) Minus- Socket
- (12) Melting Fuse
- (13) Socket for Power Cable
- (14) Passive Heat Sink

## **5. Operation of the device**

1. Switch on the device with the main switch (9)
2. Set the desired output voltage roughly with the knob (5) and make fine adjustments with the knob (6) until you see the desired output voltage in the display (1)
3. If you have an overcurrent-sensitive load, short-circuit the outputs (10 + 11) and set the current limit to the desired value before connecting the load
4. Read the current value in the digital display (2) and the voltage value in the digital display (1).
5. If the required current exceeds the set current limit, the output voltage breaks down. Adjust the current limit or remove the load depending on the application.
6. After use, switch off the device and allow the heat sink to cool before transporting or storing the device.

Note:

- The current controls (7/8) of the PeakTech 6080 A are used to set a current limit. If the loaded current of the load is below this set value, the set voltage (5/6) is completely output. If the loaded current of the load exceeds the set current limiter value, the output voltage for protection of the connected load completely breaks down and amounts to approx. 0V.
- The current and voltage readings represent the measured actual value. Therefore, if the load requires less current than is set via the rotary control, only this actually required current value is displayed.
- The voltage display shows the set voltage value even without the load connected - the current display shows zero without connected load (with open terminals). Only after connecting a load (load or short-circuit bridge) is a current value displayed.

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*This manual considers the latest technical knowing. Technical changes 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.*

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