

Technical data:

Output voltage AC: 3/6/9/12V 3A, may be set by variable switch;
maximum continuous load at 6V and 12V: 3A

Output voltage DC: 0 ... 12 V, may be set using potentiometer;
Maximum load at various voltages: 0 ... 9V max. 3A; 9 ... 10.5V max. 1.6A;
10.5 ... 12V max. 0.5A

Input voltage: 230V AC 50...60Hz

Fuses: Primary – T630mA fine-wire fuse in socket.
Secondary: each of the voltage outputs is short-circuit- and
overload-protected. In the event of an overload, the power supply
shuts down automatically in both voltage ranges (electronic fuse),
and after a short while it is once again ready to operate. Turn the
power supply off and on again once if necessary.

Case: plastic, ABS
Dimensions: approx. 160 x 120 x 45 mm
Weight: approx. 1130 g

Take care that the device does not fall. In the event that this does occur, have the
device examined or repaired by authorized service personnel.

In the event that unforeseen difficulties arise during operation, switch off the device
and contact the dealer.

Do not subject the device to dripping or sprayed water.

Use only fuses of the type and current rating indicated.

The device contains no components requiring maintenance on the part of the user.

This device may only be operated by qualified personnel or by persons they
instruct in its use.

NTL - Fruhmann GmbH - 7372 Karl, Austria



P3130-3M Low-voltage transformer with digital display, "inno"



Low-voltage transformer with digital display, „inno“

This unit may be used as a power supply in any experiment listed in the
NTL student experiment series as well as for most electricity and elec-
tronics experiments in the demo series. For mounting the device
magnetically there are 10 strong neodymium magnets inserted in the
rear panel.

From mains voltage it supplies any of four selectable AC voltage levels
as well as continuously variable, electronically stabilized DC voltage.

The DC voltage level is indicated on a 2 1/2 digit display.

Operating instructions

The output voltage may be set variably to 3, 6, 9, or 12 volts AC using the variable switch.

The maximum continuous load rating at 6 volts and 12 volts is 3A; peak loads of up to 11A may be drawn briefly.

Output voltage DC: 0 ... 12 V, may be set using potentiometer.

Maximum load at various voltages: 0 ... 9V max. 3A; 9 ... 10.5V max. 1.6A; 10.5 ... 12V max. 0.5A

Each of the output lines is overload-protected using PTCs. The red LED indicates that a PTC has been triggered and the power shut down. If this occurs, disconnect the leads from the AC output, make any corrections to the experiment arrangement and then reconnect the leads. Switching off the PTCs has no effect on the display or the DC output.

The AC and DC output terminals are connected internally, you should not, therefore, connect them in experiment circuits. This will not cause any damage to the unit, however. Normally, loads can be connected to the AC and DC outputs simultaneously. In the case of a general overload, the fine-wire fuse in the lid of the case will be irreparably damaged.

The ventilation slits for the forced-air cooling system must not be covered. The unit is additionally protected by a thermal fuse. The DC output shuts down as soon as the heat sink becomes too hot. Switching off the DC output has no effect on the AC output.



- 1 2-pole mains cable permanently connected to the case
- 2 Power switch
- 3 Variable switch for 3/6/9/12V AC
- 4 Potentiometer for 0...12V DC
- 5 4 mm safety jacks for AC output voltage
- 6 4 mm safety jacks for DC output voltage
- 7 LED display indicating DC voltage output level
- 8 AC overload indicator
- 9 T630mA primary fuse
- 10 strong neodymium magnets (inserted in the rear panel)