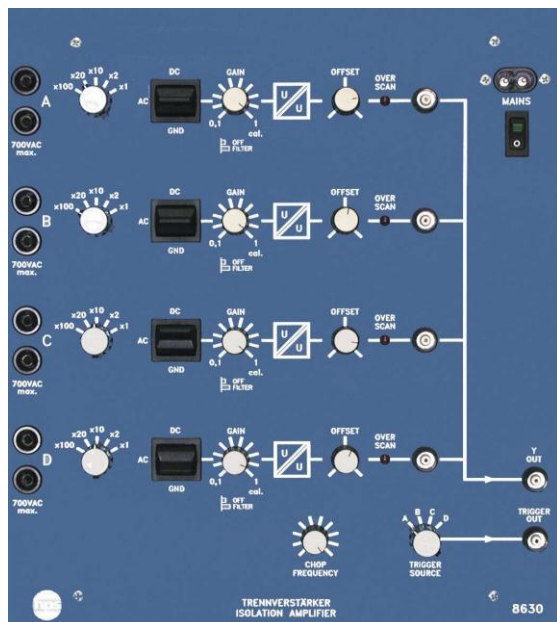




Type 8630

Isolation Amplifier



Front view of the
Isolation Amplifier

Type 8630

- 4 potential-free differential inputs
- Every input switchable to GND/DC/AC
- Switchable LF filter
- All measuring outputs through fully insulated BNC jacks
- Overload indicator for all channels
- Can be used directly as a benchtop unit or in a demonstration rack

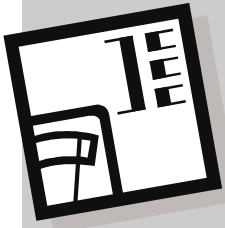
The Isolation Amplifier is used for safe, potential-free measuring of different voltages in connection with an oscilloscope.

Up to 4 signals, even with different reference points, can be displayed on one oscilloscope channel.

The Isolation Amplifier can be used universally from the fundamentals of electrical engineering right up to power electronics.

The inputs and outputs are electrically isolated by an isolation amplifier component with a linearity error of a mere 0.008% and a coupling capacity of 2 pF.

To conduct the experiments, the Isolation Amplifier is placed on a table or suspended in an hps rack for demonstration purposes.



Type 8630

Mechanical Data

The front panel of the Isolation Amplifier is made of 5 mm thick laminate, matt blue in colour with white engraving representing the built-in function groups.

The rear of the Board is protected with a grey plastic cover. Its shape allows the Board to be placed at an ergonomically favourable angle for example on a table.

Accessories Recommended

- 2 Connecting Leads (Type 9102.14-1), Screened, 50 , 1 m long, with insulated connectors (BNC/BNC)

Isolation Amplifier

Technical Data

Mains connection

- Voltage: 230 V AC (standard version);
50 ... 60 Hz; 20 VA

If you require the special 110 V version, please state so when ordering as the unit can only be converted in the factory.

Inputs

- Differential inputs: 4 (potential-free and electrically isolated)
Wiring takes place through 4 mm safety jacks.
- Input voltage: max. 1000 V DC / 700 V AC
- Selector switch: AC/DC/GND
- Measuring ranges: x 100; x 20; x 10; x 2; x 1
- Input attenuator: enables – additionally to the input divider – a continuous attenuation by factor 10 (x 0.1... x 1).
An LF filter for suppression of high-frequency interferences is connected when pulling the rotary switch.
Limit frequency of the LF filter: 500 Hz
- Input resistance: 1 M
- Input capacitance: 30 pF
- Limit frequency: 50 kHz (-3 dB)

Outputs

- Electrically isolated from the inputs
- Channels (A ... D) through 4 fully insulated BNC jacks
- Channels (A ... D) through one fully insulated BNC jack (multiplex mode)
- Variable chopper frequency for low interference signal transmission;
frequency range: approx. 2 kHz ... 50 kHz
- Trigger signal through insulated BNC jack, switchable to channel A ... D
- Overload indicator: for every channel, LED indicator
- Output voltage: < -8 V, > +8 V
- Zero adjustor: +/- 8 V

Dimensions

- 266 x 297 x 90 mm (w x h x d)

Weight

- 2.4 kg

Subject to technical modifications.