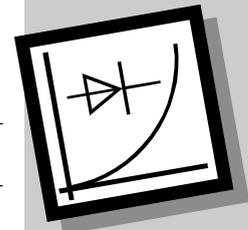
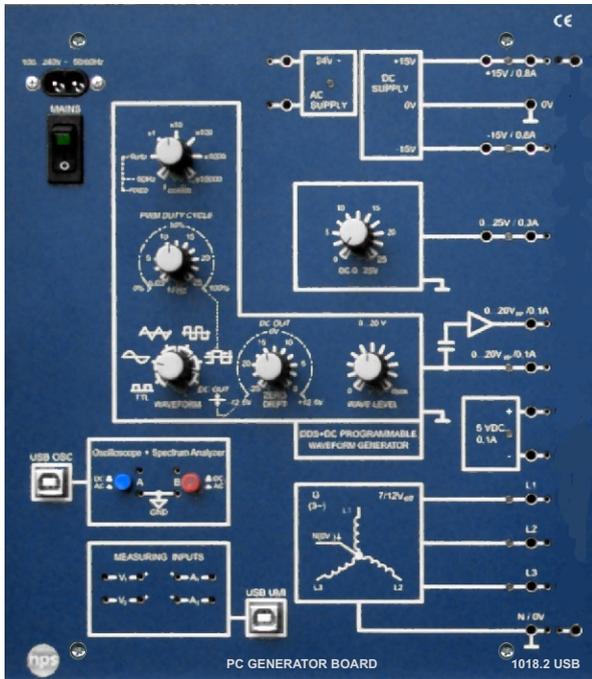


# Fundamentals of Electrical Engineering / Electronics



## PC GENERATOR BOARD

1018.2 USB



PC GENERATOR BOARD (Type 1018.2 USB)

- All power supplies for principles of electrical engineering/ electronics on one Board
- With integrated DC, AC and three-phase current sources as well as a function generator
- Function generator, DC and three-phase current sources short-circuit proof and LED-monitored
- The out signals of the voltage generator can be adjusted precisely with a PC via built-in USBconnection and the operators software. These signals can be simultaneously projected with a beamer.
- Useable with or without a PC
- If the measuring interface incl. measuring software (1018.4) is used, there are two inputs for current and two inputs for voltage available
- With the optional USB-Oscilloscope (1018.5) you can view all signals time or frequency based

## Technical Data

### Mains connection

- Voltage: 230 V AC / 115 V AC (110 V AC)  
50 ... 60 Hz; appr. 70 VA

### AC and DC voltages

- +15 V ( $\pm 5\%$ ); 800 mA
- -15 V ( $\pm 5\%$ ); 800 mA
- +5 V; 100 mA
- 0 ... 25 V; 300 mA

### AC voltage

- 24 V AC; 100 mA

### Funktionsgenerator

- Sinewave:  $U_{pp} = 0 \dots 20$  V  
 $f = \text{appr. } 1 \text{ Hz} \dots 250 \text{ kHz}$   
 $R_i = 60 \Omega$

- Squarewave, positive:  
 $U_p = 5$  V (TTL)  
 $f = \text{appr. } 1 \text{ Hz} \dots 250 \text{ kHz}$   
 $R_i = 60 \Omega$   
 $V = 2$
- Squarewave:  
 $U_{pp} = 0 \dots 20$  V  
 $f = \text{appr. } 1 \text{ Hz} \dots 250 \text{ kHz}$   
 $R_i = 60 \Omega$   
 $V = 2$
- Triangalwave:  
 $U_{pp} = 0 \dots 20$  V  
 $f = \text{appr. } 1 \text{ Hz} \dots 250 \text{ kHz}$   
 $R_i = 60 \Omega$

### Three-phase current generator

- Phase voltage: 7V (eff.)
- Line voltage: 12V (eff.)
- Line current: max. 50 mA
- Frequency: appr. 50 Hz

The outputs of the function generator, DC and three-phase current sources are short-circuit-proof and LED-monitored.

### Mechanical data

The front panel of the GENERATOR BOARD is made of 5 mm thick laminate, matt blue in colour with white printing 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.

The outputs are 2 mm and 4 mm jacks.

### Experiment manuals

- Direct Current Technology (Type V 0101 4th Ed.)
- Alternating Current Technology (Type V 0102 4th Ed.)
- Semiconductor Components (Type V 0103 4th Ed.)
- Basic Electronic Circuits (Type V 0104 4th Ed.)

### Dimensions / weights

- 266 x 297 x 120 mm (w x h x d)  
weight: appr. 2.8 kg

## Accessories Required:

- Set of Accessories (Type 1018.11), consisting of: storage board, resistors, capacitors, semiconductors, transformer coils
- Set of Accessories (Type 1018.11.1), consisting of: connecting leads and plugs
- Universal assembly board (Type 1012.1 or Type 1012.2)

## Accessories Recommended (optional):

- Measuring interface (Type 1018.4) incl. measuring software to display measured data on a PC-monitor
- USB-Oscilloscope (Type 1018.5)
- IC BOARD (Type 3530), for additional experiments with commercial components

