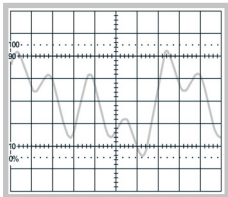


## Arbitrary Power Supply HM8143

HM8143



AF arbitrary signal



HO880 IEEE-488 (GPIB)  
Interface (Option)



HZ42 19" Rackmount kit 2RU



- ☑ 2 x 0...30V/0...2A      1 x 5V/0...2A
- ☑ Display resolution 10mV/1mA
- ☑ Parallel (up to 6A) and Series (up to 65V) Operation
- ☑ Electronic load up to 60W per Channel (max. 2A)
- ☑ Arbitrary waveform power supply (4096 points, 12 bit):  
Creation of customized waveforms
- ☑ Software for remote control and for creation of Arbitrary  
waveforms
- ☑ Electronic fuse and Tracking mode for 30V outputs
- ☑ External modulation of output voltages:  
Input Voltage 0...10V, bandwidth 50kHz
- ☑ SENSE lines for compensation of the voltage drop across the  
cables
- ☑ Multimeter mode for all adjustable outputs
- ☑ Galvanically isolated USB/RS-232 Interface, optional IEEE-488  
in HM8143G

## Arbitrary Power Supply HM8143

All data valid at 23 °C after 30 minute warm-up

### Outputs

2 x 0...30 V/2 A  
1 x 5 V/2 A

On/off pushbutton control, Floating outputs (allowing parallel and series operation), current limit, electronic fuse, tracking mode

### Channels 1 + 3 (0-30 V)

**Output voltage:** 2 x 0...30 V  
**Setting resolution:** 10 mV  
**Setting accuracy:** ±3 digits (typ. ±2 digit)  
**Measurement accuracy:** ±3 digits (typ. ±2 digit)  
**Residual ripple:** < 5 mV<sub>rms</sub> (3 Hz...300 kHz)

**Recovery time (10 %...90 % load variation)**  
45 µs within ±1 mV of nominal value  
16 µs within ±100 mV of nominal value

**Max. transient deviation:** typ. 800 mV

**Recovery time (50 % basic load, 10 % load variation)**  
30 µs within ±1 mV of nominal value  
10 µs within ±100 mV of nominal value

**Max. transient deviation:** typ. 120 mV

**Compensation of line resistances (SENSE):** up to 300 mV

**Output current:** 2 x 0...2 A

**Setting resolution:** 1 mA

**Setting accuracy:** ±3 digits (typ. ±2 digit)

**Measurement accuracy:** ±3 digits (typ. ±2 digit)

**Recovery time:** < 100 µs

### Channel 2 (5V)

**Accuracy:** 5 V ± 50 mV

**Output current:** max. 2 A

**Ripple:** ≤ 100 µV<sub>rms</sub> (3 Hz...300 kHz)

**Recovery time (10 %...90 % load variation)**  
30 µs within ±1 mV of nominal value  
0 µs within ±100 mV of nominal value

**Max. transient deviation:** typ. 60 mV

**Recovery time (50 % basic load, 10 % load variation)**  
30 µs within ±1 mV of nominal value  
0 µs within ±100 mV of nominal value

**Max. transient deviation:** typ. 20 mV

### Arbitrary Function (Channel 1 only)

**Number of points:** max. 4096

**Resolution:** 12 Bit

**Parameters of points:** Dwell time and Voltage

**Dwell time:** 100 µs ... 60 s

**Repetition rate:** 1...255 and continuous

### Inputs:

**Modulation input (BNC socket):** 0...10 V

**Accuracy:** 1 % of full scale

**Modulations bandwidth (-3dB):** > 50 kHz

**Slew rate (dV/dt):** 1 V/µs

**Trigger input (BNC socket):** Triggering the arbitrary function

**Level:** TTL

### Miscellaneous

**Max. voltage applicable to output terminals (ON/OFF)**  
CH 1 + CH 3: 30 V  
CH 2: 5 V

**Voltage to earth:** max. 150 V

**Display:** 4 x 4-digit 7-segment LEDs

**Interface:** USB/RS-232 (H0820), IEEE-488 (option)

**Protection class:** I acc. to EN 61010 (IEC 61010) with protective earth

**Power supply:** 115...230 V ± 10%; 50/60 Hz, CAT II

**Mains fuse:** 115 V: 2 x 6 A slow blow 5 x 20 mm  
230 V: 2 x 3,15 A slow blow 5 x 20 mm

**Power consumption:** approx. 300 VA

**Operating temperature:** +5°C...+40°C

**Storage temperature:** -20°C...+70°C

**Rel. humidity:** 5%...80% (non condensing)

**Dimensions (W x H x D):** 285 x 75 x 365 mm

**Weight:** approx. 9 kg

**Accessories supplied:** Operator's Manual and power cable, Software  
**Optional accessories:** HZ10S/R Silicone test lead, HZ42 19" Rackmount kit 2RU, H0880 IEEE-488 (GPIB) Interface (galvanically isolated)

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