

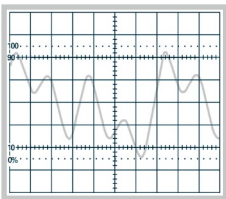
## Arbitrary Power Supply HM8143



HM8143



AF Arbitrary Signal



H0880 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 Serial (up to 65V) Operation
- ✓ Electronic Load up to 60W per Channel (max. 2A)
- ✓ Arbitrary Waveform Power Supply (4,096 Points, 12 Bit):  
Creation of customized Waveforms
- ✓ Free of charge 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 Dual-Interface,  
optional IEEE-488 (GPIB)

## Arbitrary Power Supply HM8143

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

### Outputs

2 x 0...30V/2A	On/off pushbutton control, Floating outputs (allowing parallel and series operation), current limit, electronic fuse, tracking mode
1 x 5V/2A	

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

Output voltage:	2 x 0...30V
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 lead resistances (SENSE):	up to 300 mV
Output current:	2 x 0...2A
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:	5V ±50 mV
Output current:	max. 2A
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. 4,096
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...10V
Accuracy	1% of full scale
Modulation bandwidth (-3 dB)	>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:	
CH1 + CH3:	30V
CH2:	5V
Voltage to earth:	max. 150V
Display:	4 x 4-digit 7-segment LEDs
Interface:	Dual-Interface USB/RS-232 (H0820), IEEE-488 (GPIB) (optional)
Protection class:	I acc. to EN 61010-1 (IEC 61010) with protective earth
Power supply:	115/230V ±10%; 50...60 Hz, CAT II
Mains fuse:	115V: 2 x 6A slow blow 5 x 20 mm 230V: 2 x 3.15A slow blow 5 x 20 mm
Power consumption:	approx. 300VA
Operating temperature:	+5...+40 °C
Storage temperature:	-20...+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:** Operating manual, line cord, CD, Software

#### Recommended accessories:

H0880	Interface IEEE-488 (GPIB), galvanically isolated
HZ10S	5 x silicone test lead (measurement connection in black)
HZ10R	5 x silicone test lead (measurement connection in red)
HZ10B	5 x silicone test lead (measurement connection in blue)
HZ13	Interface cable (USB) 1.8 m
HZ14	Interface cable (serial) 1:1
HZ42	19" Rackmount Kit 2RU
HZ72	GPIB-Cable 2 m