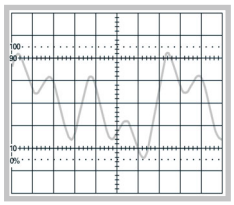
HAMEG Instruments

Arbitrary Power Supply
HM8143

HM8143

USB | RS-232 | optional IEEE-488 | inclusive

AF arbitrary signal



HO880 IEEE-488 (GPIB) Interface (Option)

HZ42 19" Rackmount kit 2RU

- ☑ 2x 0...30V/0...2A 1x 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_{rms} (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_{rms} (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: CH 2:	30 V 5 V
Voltage to earth:	max. 150 V	
Display:	4 x 4-digit 7-segment LEDs	
Interface:	USB/RS-232 (HO820), 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, HO880 IEEE-488 (GPIB) Interface (galvanically isolated)

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