R&S®HMC804x

100 W Power Supply
1, 2 or 3 Channels

ROHDE&SCHWARZ

Test & Measurement

Product Brochure | 00.01

R&S®HMC8043
R&S®HMC8042
R&S®HMC8041
Power Supply

The specifications are based on a 30 min warm-up period.

Electrical Specifications	
Total power output	100W
Maximum power per Channel HMC8043 HMC8042 HMC8041	 33W 50W 100W
Voltage Output	0-32V
Current Output HMC8043 HMC8042 HMC8041	 3A max (power limit) 5A max 10A max
Number of outputs HMC8043 HMC8042 HMC8041	 3 2 1
Line & load regulation (Sense connected)	
Constant voltage HMC8043 HMC8042 HMC8041	 <0.02% + 3mV <0.03% + 5mV <0.03% + 5mV
Constant Current HMC8043 HMC8042 HMC8041	 <0.03% 200µA <0.03% 200µA <0.03% 200µA
Voltage ripple 20Hz to 20MHz (Front connector)	450µV_{rms} / 4mV_{pp}
Current ripple 20Hz to 20Mhz	typ. <1mA_{rms}
Response time (10%...90% load change)	1ms (±20mV)
Remote Sense max. voltage	1V
Programming accuracy (23° C ±5° C)	
voltage: all models	 <0.05% +2mV
current: HMC8043 HMC8042/41	 0.05% +2mA 0.1% +5mA
Readback accuracy (23° C ± 5° C)	
voltage: all models	 <0.05%+2mV
current: HMC8043 HMC8042 HMC8041	 0.05% +2mA 0.05% +7mA 0.05% +4mA
Resolution	
voltage	1mV
current	0.1mA (I<1A) 1mA (I>=1A)
Voltage to earth	250V_{DC}
Reverse Voltage	33V max.
Inverse Voltage	0.4V max.
Max. current allowed in case of inverse voltage	3A
Supplemental characteristics	
Temperature coefficient for 12 months (per K) ±(% of output + offset)	voltage: >0,02% +3mV current: >0,02%+3mA
Output voltage overshoot during turn-off of AC power and channel output on	100mV
Over temperature protection	Yes
Voltage programming speed (within 1 % of total excursion)	
Positive voltage change	
no load	10ms + µC-time
with resistive load	10ms + µC-time
Negative voltage change	
no load	500ms + µC-time
with resistive load	10ms + µC-time
Command processing time	<30ms
Over Voltage Protection	Yes
Over Power Protection	Yes
Energiemeter	Yes
EasyRamp	Yes
EasyRamp time	10ms ... 10s
Electronic Fuse	
Fuse trip time	<100us
Fuse linking	<100us + trip time of linked channel
Fuse delay	10ms ... 10s

Analog Interface	
Shunt resistance 4…20mA	250 Ohm
Input resistance 0…10V	>10 kOhm
Update rate V/I interface	10 changes/sec
Response time V/I interface	<150ms
Trigger level	TTL
Trigger response time	<1ms
Resolution	14 bit
Arbitrary (EasyARB)	
Parameter	Voltage, current, time and interpolation mode
Number of Points	512
Dwell time	10ms … 10min
Repetition rate	continous or burst mode with 1…255 repetitions
Trigger	manually, interface or trigger input
Logging	
Sampling speed	1000,100,10,1…3600 Sa/s
Resolution HMC8043	1mV / 0.1mA (<100Sa/s); 10mV / 1mA (1000Sa/s)
Resolution HMC8042/41	1mV / 1mA (<100Sa/s); 10mV / 10mA (1000Sa/s)
Memory	Internal memory and External memory (USB-Stick)
Maximum number of Points	limited by memory
Sequencing	
Synchronicity	<100us
Delay per channel	1ms … 60s
Remote interfaces	USB-TMC, USB-CDC (Virtual COM), LAN (LXI), GPIB (optional)

Miscellaneous	
Input power option	100-240 VAC +/-10% 50/60 Hz
Maximum input power	200W
Fuse	T3, 15L 250V
Operating temperature	+0°C ..+40°C
Storage temperature	-20°C..+70°C
Humidity	5...80%
Display	3,5" / QVGA
Dimensions (H x W x D)	222x88x280mm
Rack mount capability 1/2 19"	Yes
Weight	2,6kg

Recommended Accessories

HZC95
19" rackmount kit
for HMC series, 2 HE

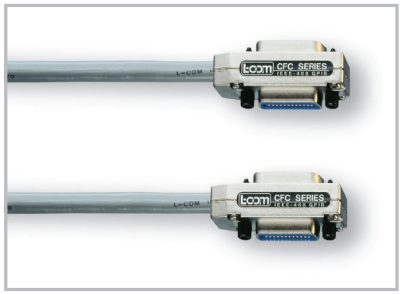
HZC40
Female connector
with ejectors, 8x2-pole

Accessories included:
Line cord, printed operating manual, software-CD

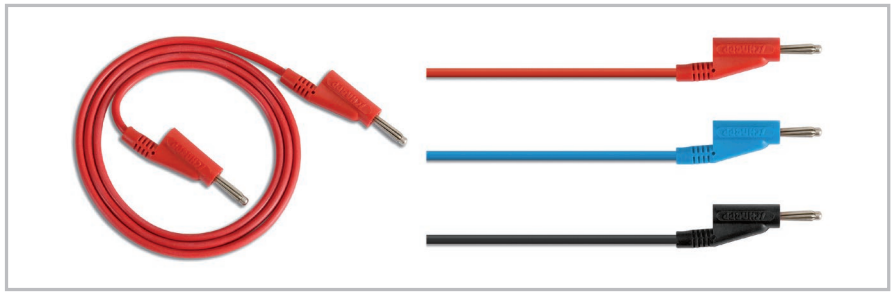
Printed operating manual

Software-CD

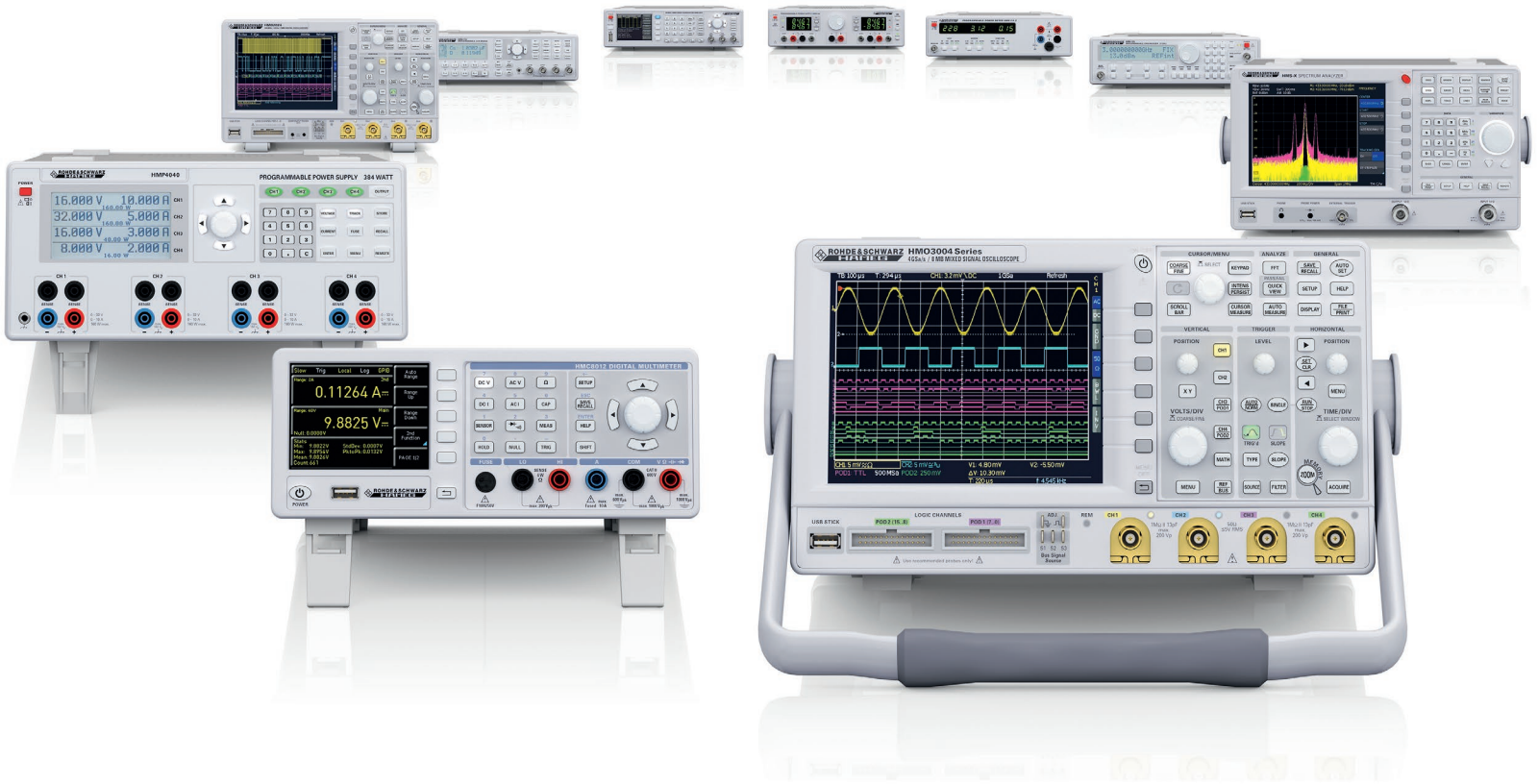
HZ72
IEEE-488 (GPIB) bus
interface cable



HZ10
5x silicon test lead
HZ10S: black, HZ10R: red, HZ10B: blue



value-instruments.com



www.hameg.com

HAMEG Instruments GmbH
Industriestr. 6 | 63533 Mainhausen | Germany | Phone +49 (0) 6182 8000

PD 3607.00169.32 | Version 00.01 | 04/2014 | © HAMEG Instruments GmbH
Data without tolerance limits is not binding | Subject to change

3607016932

PD 3607.0169.32 V 00.01 PDP1 en