

R&S®HM8143 Power Supply

Flexible solution for special applications



The perfect choice for

Engineering lab

Production testing

Simulation of battery
charging process

Maintenance &
repair

Key features

The R&S®HM8143 power supply is the perfect choice whenever two-quadrant operation is needed. Besides the source functionality, it also provides electronic loads to accurately sink current and dissipate power in a controlled manner, for example to emulate the characteristics of a battery being charged or unloaded.

The R&S®HM8143 offers two channels with up to 30 V source and sink functionality plus one source channel with 5 V. Electronic fuse and modulation inputs are additional features.

Key specifications

Total power output	130 W
Number of outputs	3
Voltage output CH1, CH3	0 V to 30 V
Voltage output CH2	5 V
Current output per channel	max. 2 A
Current sinking CH1, CH3	max. 2 A
Modulation input (CH1, CH3)	DC to 20 kHz bandwidth

Your benefit	Features
Two channels with source/sink functionality	Two-quadrant functionality can be used to source or sink current, e.g. to emulate any charging/unloading application
Additional 5 V source channel	Can be used to supply often used 5 V circuitries without needing another instrument
Electronic fuse	Overcurrent protection can be set to switch off all channels in case the configured current limit is overdriven
Modulation inputs	Via external modulation signals, the R&S®HM8143 can be used as a power amplifier, for example to supply AC motors

► For more information,
see www.rohde-schwarz.com/product/HM8143

Parallel & serial operating mode

In the parallel operating mode, channels can be bundled to achieve higher currents.
In the serial operating mode, channels can be combined for higher output voltages.

Modulation inputs

The R&S®HM8143 provides two modulation inputs on the rear, so it can be used as a power amplifier with a frequency range from DC to 50 kHz.
Applications include testing of AC motors, relays, etc.

Electronic fuse

In order to provide even better protection than current limiting, the R&S®HM8143 offers the feature of an electronic fuse. As soon as the current limit is reached, all outputs are simultaneously disabled.

Arbitrary function

The arbitrary mode can be used to generate a time/voltage flow. A table comprising up to 1024 voltage and time values can be defined using external software tools.

Ordering information

Model configuration information	
Description	Model
Two-quadrant power supply	R&S®HM8143

System component	
Description	Type
19" rackmount kit, 2 HU	R&S®HZ42

Included accessories:
The R&S®HM8143 includes operating manual, power cable and three-year warranty.



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