



R&S® HMP2020 versus Keysight E3632A



Key features

- ▶ R&S®HMP power supplies are primarily designed for industrial production environments and development labs
- ▶ The rugged instruments offer high efficiency with low residual ripple and many protective functions
- ▶ Galvanically isolated, floating outputs with overload and short-circuit protection
- ▶ Remote sensing eliminates voltage drops on load leads
- ▶ Intuitive programming features and 19" rack adapters make the power supplies ideal for production environments

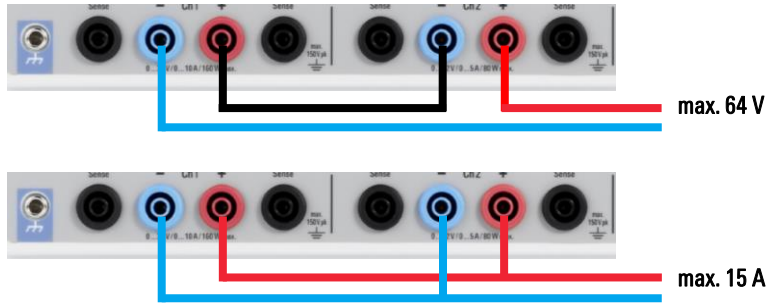
Your benefit	Features
Flexible channel configuration	▶ All channels are galvanically isolated and can be combined to drive balanced circuits or for higher voltages/currents
Readback values	▶ The display shows voltage and current values in real time
USB interface	▶ USB interface enables device to be controlled via external PCs
Flexible overcurrent protection	▶ FuseLink enables electronic fuses to be freely combined in each channel ▶ A fuse delay can prevent premature switch-off in the event of a short current spike
Intuitive to use	▶ All basic R&S®HMP2020 power supply functions can be operated directly via keys on the front panel ▶ The menu is only needed for special functions
EasyRamp function	▶ Voltage increases linear to the set value within the defined time frame

Parameter	R&S®HMP2020	Keysight E3632A
Number of channels	2	1
Output voltage per channel	0 V to 32 V	0 V to 30 V
Max. output power	188 W	120 W
Max. output power per channel	CH1: 160 W CH2: 80 W	120 W
Max. output current per channel	CH1: 10 A CH2: 5 A	≤ 15 V: 7 A ≤ 30 V: 4 A
Programming resolution	1 mV / 0.2 mA	1 mV / 0.5 mA
Programming accuracy	< 0.05 % + 5 mV < 0.1 % + 5 mA	< 0.05 % + 10 mV < 0.2 % + 10 mA
Voltage ripple and noise (20 Hz to 20 MHz)	< 1.5 mV (RMS)	< 350 µV (RMS)
Current ripple and noise (20 Hz to 20 MHz)	< 1 mA (RMS)	< 2 mA (RMS)
Load recovery time	< 1 ms	---
Remote sensing	yes, for each channel	yes
Arbitrary function	EasyArb	no
Readback resolution	1 mV / 1 mA	0.5 mV / 0.1 mA
Readback accuracy	< 0.05 % + 5 mV < 0.1 % + 2 mA	< 0.05 % + 10 mV < 0.2 % + 10 mA
Protective functions	OVP / OCP / OTP	OVP / OCP
Remote control interfaces	standard: USB/LAN optional: GPIB, RS-232	standard: GPIB, RS-232
Command processing time	< 50 ms	< 100 ms
Data logging	no	no
Galvanically isolated channels	yes	no
Display	240 × 64 pixel LCD	14-character display
Dimensions (W × H × D)	285 mm × 93 mm × 405 mm	213 mm × 133 mm × 348 mm
Weight	7.8 kg	9.5 kg



For more information, visit
<http://www.rohde-schwarz.com/product/HMP>

R&S®HMP2020 parallel and serial operation



R&S®HMP2020

The two output channels can be configured in series for higher output voltage, or in parallel for higher output current.

R&S®HMP2020 interfaces versus Keysight E3632A interfaces



R&S®HMP2020 interfaces

Standard

- ▶ LAN, USB
- ▶ Sense lines (shown here)

Optional

- ▶ GPIB, RS-232

Keysight E3632A interfaces

Standard

- ▶ GPIB, RS232

Optional

- ▶ None

R&S®HMP2020 special functions

EasyArb

- ▶ EasyArb can be used for individual channels or all channels
- ▶ Up to three complete arbitrary curves with up to 128 points can be saved internally and retrieved as needed

Save and recall

- ▶ Frequently used settings can be saved and retrieved with the "Store" and "Recall" keys

Remote control function

- ▶ The R&S®HMP2020 can be remotely controlled for use in automated test systems
- ▶ Uses standard commands for programmable instruments (SCPI) script

Ideal for production

- ▶ Intuitive programming features and 19" rack adapters make the power supplies ideal for production environments

Advantages of R&S®HMP2020 over Keysight E3632A

