

⇒ Highlights

- Ideal zero-voltage switch
- Low power loss
- Simple functionality modification



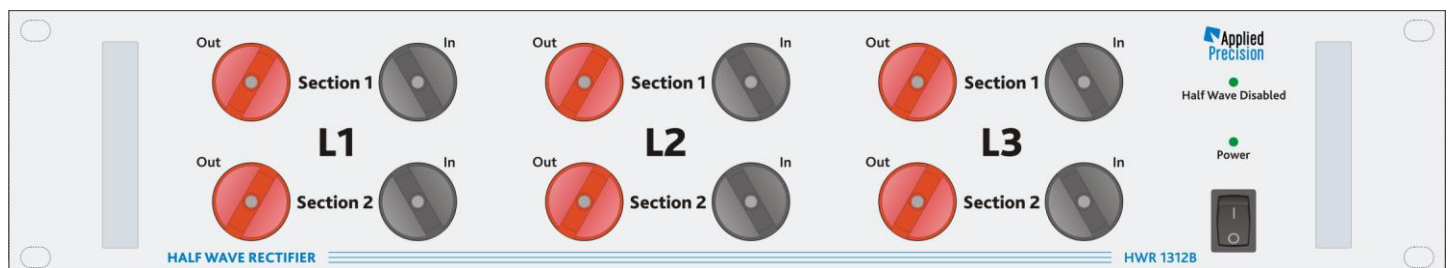
⇒ Description

Half Wave Rectifier is designed for meter testing according to IEC 62053-21 Appendix A.1 - Half wave rectification (d. c. and even harmonics).

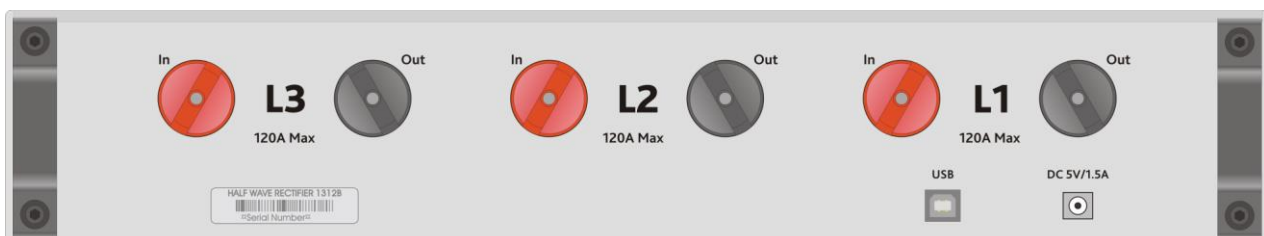
The **Half Wave Rectifier HWR 1x12B** is a single phase (HWR 1112B) or three phase (HWR 1312B) device which acts as an ideal diode with null-voltage switch and low power loss. The device enables to test single or three-phase meters up to 120A. It requires division of tested meters into two equal sections. The sections are fed by the opposite half-wave. Due to null-voltage switch principle the symmetry of the load impedance is not critical for exact power split and therefore for the measurement accuracy. The Half Wave Rectifier acts as a linear device and does not affect the current source signal distortion.

Half Wave Rectifier has two modes of operation:

- **Half Wave mode**
The input current is split - the negative half wave flows through the Section 1 and the positive half wave flows through the Section 2
- **Normal mode** (Half Wave Disabled)
Both sections are connected in series and the input current flows through both sections



Front panel of HWR 1312B



Rear panel of HWR 1312B

⇒ Available Models

Model	Phases
HWR 1112B	1
HWR 1312B	3

⇒ Technical Specification

Maximum Effective Voltage	40 V
Maximum Peak Voltage	60 V
Serial Resistance	3 mΩ
Power Supply	Power Adapter (100 – 240 V _{AC} / 5 V _{DC} / 1.5 A)
Communication Interface	USB
Operation Temperature	+20 °C to +40 °C
Dimensions (L x W x H)	490 x 420 x 90 mm (2U form factor)
Weight (approx.)	10 kg