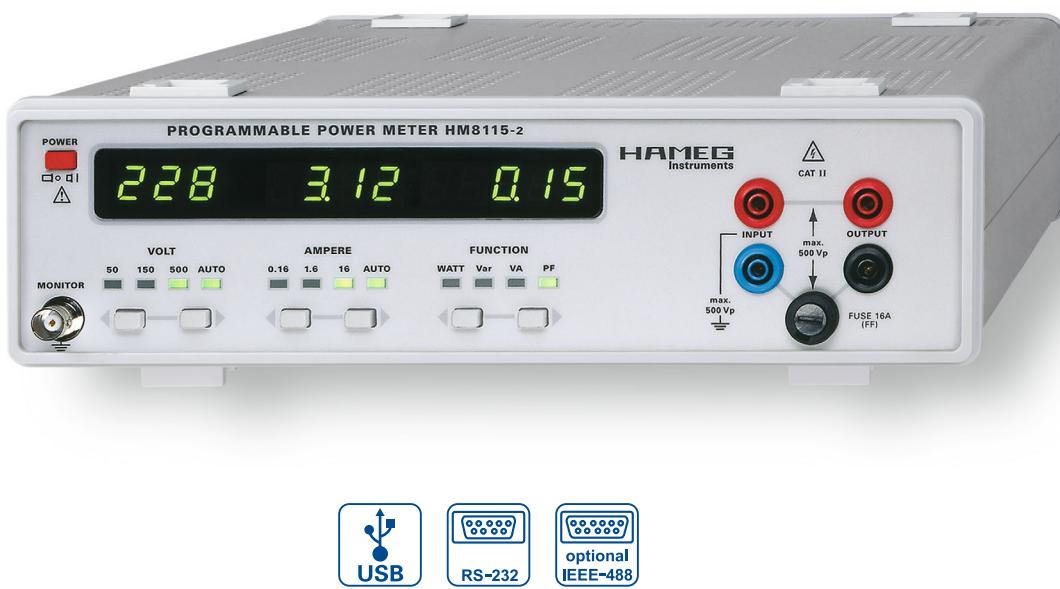


HM8115-2

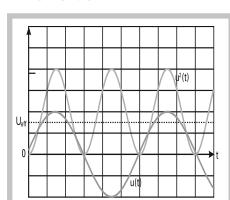
## 8 kW Power Meter HM8115-2



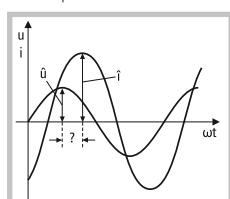
HZ815 Power adapter



RMS value



Active power



- Wide measurement range 1 mW...8 kW
- Voltage range 100 mV...500 V, current range 1 mA...16 A
- Frequency range DC...1 kHz
- Simultaneous voltage, current and power display
- Display of apparent, effective and reactive power
- Power factor display
- Autoranging, simple operation
- Monitor output (BNC) representing the instantaneous active power
- Suitable for measurements on frequency converters
- Software for remote control and data acquisition included
- Galvanically isolated USB/RS-232 Interface, optional IEEE-488

## 8 kW Power Meter HM8115-2

All data valid at 23°C after 30 minute warm-up

| Voltage           | True RMS voltage measurement (AC+DC) |  |       |
|-------------------|--------------------------------------|--|-------|
| Ranges:           | 50 V                                 | 150 V                                      | 500 V |
| Resolution:       | 0.1 V                                | 1 V  | 1 V   |
| Accuracy:         | 20 Hz...1 kHz:<br>DC:                | ± (0.4 % + 5 digit)<br>± (0.6 % + 5 digit) |       |
| Input impedance:  | 1 MΩ    100 pF                       |  |       |
| Crest factor:     | max. 3.5 at full scale               |  |       |
| Input protection: | max. 500 V <sub>p</sub>              |  |       |

| Current           | True RMS current measurement (AC+DC)  |  |       |
|-------------------|---------------------------------------|--|-------|
| Ranges:           | 160 mA                                | 1.6 A                                      | 16 A  |
| Resolution:       | 1 mA                                  | 1 mA                                       | 10 mA |
| Accuracy:         | 20 Hz...1 kHz:<br>DC:                 | ± (0.4 % + 5 digit)<br>± (0.6 % + 5 digit) |       |
| Crest factor:     | max. 4 at full scale                  |  |       |
| Input protection: | fuse, FF 16 A 6.3 x 32 mm (superfast) |  |       |

| Active power measurement |                        |  |        |         |        |        |
|--------------------------|------------------------|--|--------|---------|--------|--------|
| Ranges:                  | 8 W                    | 24 W   | 80 W   | 240 W   | 800 W  | 2400 W |
| Resolution:              | 1 mW                   | 10 mW  | 100 mW | 1000 mW | 100 mW | 1 W    |
| Accuracy:                | 20 Hz...1 kHz:<br>DC:  | ± (0.8 % + 10 digit)<br>± (0.8 % + 10 digit) |        |         |        |        |
| Display:                 | 4-digit, 7-segment LED |  |        |         |        |        |

| Reactive power measurement |                        |                                 |                  |             |               |  |
|----------------------------|------------------------|---------------------------------|------------------|-------------|---------------|--|
| Ranges:                    | 8 var                  | 24 var                          | 80 var           | 240/800 var | 2400/8000 var |  |
| Resolution:                | 10 mvar                | 100 mvar                        | 1000 mvar        | 1 var       | 1 var         |  |
| Accuracy:                  | 20...400 Hz:           | ± (2.5 % + 10 digit + 0.02 x P) | P = active power |             |               |  |
| Display:                   | 4-digit, 7-segment LED |                                 |                  |             |               |  |

| Apparent power measurement |                        |                     |         |            |              |  |
|----------------------------|------------------------|---------------------|---------|------------|--------------|--|
| Ranges:                    | 8 VA                   | 24 VA               | 80 VA   | 240/800 VA | 2400/8000 VA |  |
| Resolution:                | 1 mVA                  | 10 mVA              | 100 mVA | 1000 mVA   | 1 VA         |  |
| Accuracy:                  | 20 Hz...1 kHz:         | ± (0.8 % + 5 digit) |         |            |              |  |
| Display:                   | 4-digit, 7-segment LED |                     |         |            |              |  |

| Power factor measurement |              |                              |  |  |  |  |
|--------------------------|--------------|------------------------------|--|--|--|--|
| Display:                 | 0.00...+1.00 |                              |  |  |  |  |
| Accuracy:                | 50...60 Hz:  | ± (2% + 3 digit) [sine wave] | voltage and current > 1/10 of full scale |  |  |  |

| Monitor output (analog) |   |  |  |  |  |  |
|-------------------------|---|--|--|--|--|--|
| Connection:             | BNC connector [galvanic isolation to test circuit and RS-232 interface] |  |  |  |  |  |
| Reference potential:    | protective earth  |  |  |  |  |  |
| Level:                  | 1 V <sub>AC</sub> at full scale (2400/8000 digit)                       |  |  |  |  |  |
| Accuracy:               | typ. 5 %  |  |  |  |  |  |
| Output impedance:       | approx. 10 kΩ   |  |  |  |  |  |
| Bandwidth:              | DC...1 kHz  |  |  |  |  |  |
| Protected up to:        | ± 30 V  |  |  |  |  |  |

| Functions and displays |                                       |  |  |  |  |  |
|------------------------|---------------------------------------|--|--|--|--|--|
| Measurement functions: | voltage, current, power, power factor |  |  |  |  |  |
| Range selection:       | automatic/manual                      |  |  |  |  |  |
| Overrange alarm:       | visual and acoustic                   |  |  |  |  |  |
| Display resolution     |                                       |  |  |  |  |  |
| Voltage:               | 3-digit, 7-segment LED                |  |  |  |  |  |
| Current:               | 4-digit, 7-segment LED                |  |  |  |  |  |
| Power:                 | 4-digit, 7-segment LED                |  |  |  |  |  |
| Power factor:          | 3-digit, 7-segment LED                |  |  |  |  |  |

| Interface          |   |  |  |  |  |  |
|--------------------|---|--|--|--|--|--|
| Interface:         | USB/RS-232 (H0820), IEEE-488 (option)                                   |  |  |  |  |  |
| Connection RS-232: | D-sub connector [galvanic isolation to test circuit and monitor output] |  |  |  |  |  |
| Protocol:          | Xon / Xoff  |  |  |  |  |  |
| Data rate:         | 9600 Baud   |  |  |  |  |  |
| Functions:         | control/data fetch  |  |  |  |  |  |

## Miscellaneous

|                         |                                      |
|-------------------------|--------------------------------------|
| Safety Class:           | Safety Class I (EN 61010)            |
| Power supply:           | 115...230 V ± 10 %, 50/60 Hz, CAT II |
| Power consumption:      | approx. 15 W at 50 Hz                |
| Operating temperature:  | +5...+40 °C                          |
| Storage temperature:    | -20...+70 °C                         |
| Rel. humidity:          | 5...80 % (non condensing)            |
| Dimensions (W x H x D): | 285 x 75 x 365 mm                    |
| Weight:                 | approx. 4 kg                         |

**Accessories supplied:** Line cord, Operating manual, USB/RS-232 Interface (H0820), software

## Optional accessories:

|       |  |
|-------|--|
| H080  | IEEE-488 (GPIB) Interface (galvanically isolated)        |
| HZ10S | 5 x silicone test lead (measurement connection in black) |
| HZ10R | 5 x silicone test lead (measurement connection in red)   |
| HZ10B | 5 x silicone test lead (measurement connection in blue)  |
| HZ13  | Interface cable (USB) 1,8m                               |
| HZ14  | Interface cable (serial) 1:1                             |
| HZ33  | Test cable 50Ω, BNC/BNC, 0,5m                            |
| HZ34  | Test cable 50Ω, BNC/BNC, 1m                              |
| HZ42  | 19" Rackmount kit 2RU                                    |
| HZ72  | GPIB-Cable 2m  |
| HZ815 | Socket adapter   |