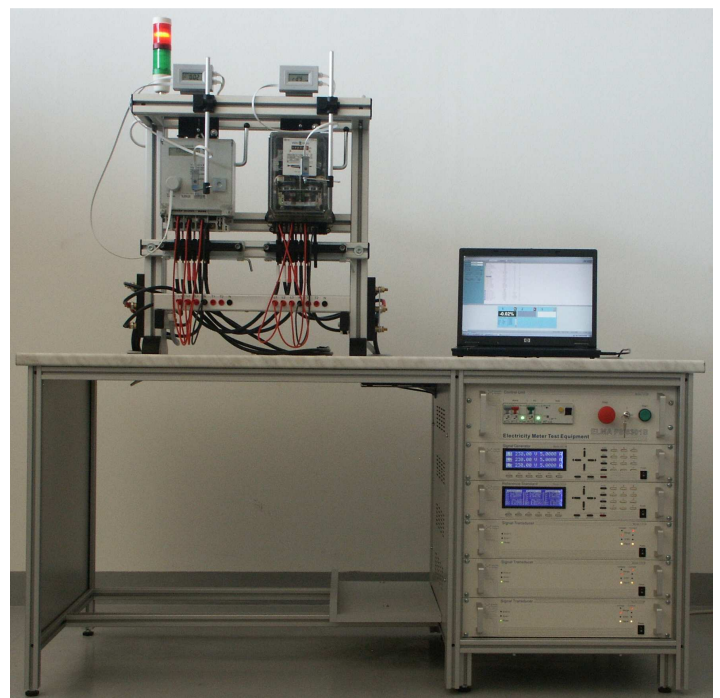


⇒ Highlights

- The accuracy of the power and energy reference meter is available up to 0.01 %. The reference meter measures all main and influencing quantities inclusive harmonic analysis and distortion of the test signals.
- The available power and the maximum current of 240 A of extremely pure synthesized 4-quadrant test signal covers the needs of both precision and high capacity testing laboratories. The test signal can be created with user defined harmonic content.
- The intelligent high resolution Local Evaluation Units use reflective optical sensors scanning the marks on meter's disk and passive sensors scanning the LED output of electronic meters. The sensors are insensitive to external light condition and posses auto-calibration capability eliminating manual adjustment. The optional optical communication channel enables simultaneous reading adjustment of registers and parameterization of electronic meters. The built-in remotely controlled dividers enable to evaluate high constant meters with light impulses up to 1 kHz.
- Suspension frame for 1, 2 or 3 positions is equipped with quick-acting connector system.
- The optional electronically balanced Common Mode Rejecter Units enable simultaneous test of electricity meters with interconnected current and voltage circuits.
- The supplied Control Software for Microsoft Windows enables multilingual operation with user definable vocabularies, user friendly configuration of testing procedures, database operations and Microsoft Office compatible user defined form of output documents to any system output device.
- Optional local net and database ensures automated data interchange, central evaluation and archivation in laboratories with multiple test equipments.



Electricity Meter Test Equipment 8301 with single position



Electricity Meter Test Equipment 8301 with two positions

⇒ Technical Specification

| Voltage | | Model |
|--|------------------------------------|------------|
| RMS Voltage Range (Phase - Neutral) | 1 x 30 V .. 300 V (500 V optional) | ELMA 8101 |
| | 3 x 30 V .. 300 V (500 V optional) | ELMA 8301 |
| Resolution | < 0.01 % | |
| Stability | < 0.005 % (integration time 150 s) | |
| Distortion Factor | < 0.3 % | |
| Setting Accuracy | 0.05 % | ELMA 8x01A |
| | 0.02 % | ELMA 8x01E |
| | 0.01 % | ELMA 8x01S |

| Current | | Model |
|-------------------|------------------------------------|------------|
| RMS Current Range | 1 x 1 mA .. 120 A (240 A optional) | ELMA 8101 |
| | 3 x 1 mA .. 120 A (240 A optional) | ELMA 8301 |
| Resolution | < 0.01 % | |
| Stability | < 0.005 % (integration time 150 s) | |
| Distortion Factor | < 0.3 % | |
| Setting Accuracy | 0.05 % | ELMA 8x01A |
| | 0.02 % | ELMA 8x01E |
| | 0.01 % | ELMA 8x01S |

| Frequency | |
|-----------------------------|----------------|
| Fundamental Frequency Range | 40 Hz .. 70 Hz |
| Resolution | < 0.002 Hz |
| Setting Accuracy | < 0.002 Hz |

| Phase Angle | | Model |
|------------------|--------------|------------|
| Range | 0 ° .. 360 ° | |
| Resolution | < 0.01 ° | |
| Setting Accuracy | 0.03 ° | ELMA 8x01A |
| | 0.01 ° | ELMA 8x01E |
| | 0.005 ° | ELMA 8x01S |

| Output Power | | Model |
|--------------|------------|-----------|
| Current * | 1 x 100 VA | ELMA 8101 |
| | 3 x 100 VA | ELMA 8301 |
| Voltage | 1 x 100 VA | ELMA 8101 |
| | 3 x 100 VA | ELMA 8301 |

* Specified for full ranges current on output terminal of the source