

**POWER METER  
KEW 6305**

***Compact Power meter for cost savings through Energy monitoring***



- Comprehensive real-time monitoring, recording and analysis of single and 3-phase systems
- Voltage, Current, Power Factor and Frequency measurements
- Power analysis (Active, Apparent and Reactive power)
- Energy analysis (Active, Apparent and Reactive energy)
- Active power accuracy:  $\pm 0.3\%rdg \pm 0.2\%f.s.$
- Automatic wiring check function to prevent incorrect connections
- Large memory capability (2GB) using built-in SD card interface
- Real-time and remote measurements
- Windows software for data analysis and setting via USB port or Bluetooth®
- Synchronous measurements between two units of KEW 6305
- Wide selection of clamp sensors allow measurements from 0.1 to 3000A
- Automatic recognition of connected sensor type

# A simple and dependable way for Cost Savings through Energy monitoring

## As easy as 1 → 2 → 3!

Starting from OFF position and rotating the Rotary switch clockwise, KEW 6305 is ready to use in 3 simple steps

### 1. SET UP

Rotate the Rotary switch to SET UP. All the instrument settings can be easily selected by using instrument buttons. All the settings can also be selected by connecting KEW 6305 to a PC via USB or Bluetooth®.

### 2. WIRING CHECK

Rotate the Rotary switch to WIRING CHECK. The Automatic Wiring check function will prevent incorrect connections, check the connections and display the results on the LCD. Error messages appear on display to indicate wrong orientation of Clamp sensors or incorrect connections.

**Everything is OK**



Shows "Good"

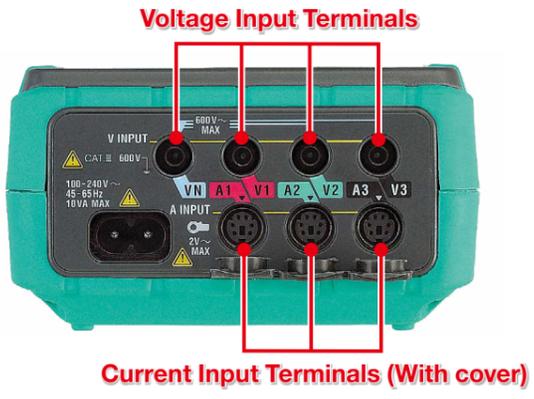
**Error is found**



Shows "Err" (Error) e.g.: Err PH A  
⊖ Current phase (orientation of sensor) may be incorrect.

### 3. W/Wh/DEMAND Measurements

Rotate the Rotary switch to W/Wh/DEMAND. The instrument can perform Instantaneous, Integration and DEMAND measurements. Press START / STOP button to start / stop recording.



## Data can be saved on SD card or transferred to a PC

**Data transmission via USB**  
Data saved on an SD card or internal memory of KEW 6305 can be directly transferred to a PC via USB.

### SD card Interface

SD cards up to 2GB can be used.

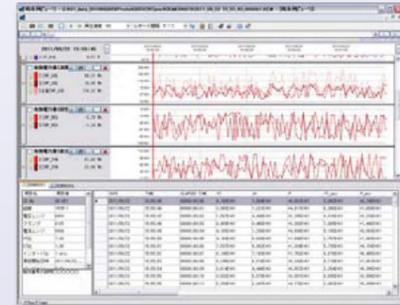


Max amount of data (reference)			
Data saved on:		SD card	Internal memory
Capacity		2GB	3MB
Instantaneous measurement		6,670,000	10,000
Integration / demand measurement interval	1 sec.	17 days	33 minutes
	1 min.	992 days	33 hours
	30 min.	3 years or more	42 days
Max number of files		511	4

\*in case the SD card is empty

**Data check** The last 10 measurements saved on SD card or internal memory are displayed on the LCD. This function allows quick check of the recorded data without using a PC.

### Software "KEW Windows for KEW 6305" for data analysis and setting via USB port



Automatic creation of graph and list from recorded data. Centralized management of setting and recorded data acquired from multiple devices. Data can be expressed in crude oil and CO<sub>2</sub> equivalent values in the report.

Please download the software from our website.

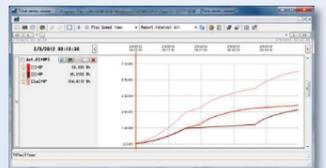
\* Windows® is a trademark or registered trademark of Microsoft Corporation.



## Various measurements by using applications for PCs and Android™ devices

### PC software application to check synchronous measurements on 2 power lines

Two units of KEW 6305 can be used simultaneously and perform synchronous measurements on 2 power lines. PC software application can synchronize recording intervals and internal clocks of two KEW 6305 via Bluetooth® communication or USB port. Measurements will be transmitted to the PC. Parameters such as active, reactive and apparent power; active, reactive and apparent energy and demand will be graphically displayed in real-time. \* For wireless communication, a PC with Bluetooth® function is required.

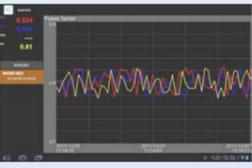


Combined values will be displayed on a graph in real-time.

### Real-time and remote measurements

Measurements can be displayed in graphic or numeric forms on Android™ devices in real-time via Bluetooth® communication. Remote checking of measurements is possible without accessing KEW 6305.

Max communication distance: 10m  
Bluetooth® is a registered trademark of the Bluetooth SIG, Inc.  
Android™ is a registered trademark of the Google Inc.



Real-time display



Tablet device



## Features

### Power and Energy measurements

Voltage (True RMS), Current (True RMS), active power, apparent power, reactive power, active energy, apparent energy, reactive energy, power factor (cosφ), frequency, demand measurement, current flowing on the neutral line (on Three-phase 4-wire measurement only)

### Recording interval can be set between 1 second and 1 hour

1/2/5/10/15/20/30 sec. 1/2/5/10/15/20/30 min. 1hour

### Power and power factor for each phase

Not only the total power and power factor but also the breakdown related to each phase are shown.

### Double power supply system via AC line and batteries

In case of mains blackout, the power to the instrument is automatically supplied by the Alkaline batteries (Max continuous measurement: 15 hours)  
In the case of both power supplies to the instrument are interrupted, recorded data just before the event of the interruption will be saved.  
Rechargeable nickel-hydrogen batteries can be used.

Products with communication functions are regulated in some countries. Please contact us for purchase. KEW 6305 is also available with the Bluetooth communication function disabled type.

## Optional Accessories

### Load current clamp sensors

MODEL 8128    MODEL 8127    MODEL 8126    MODEL 8125    MODEL 8124



MAX 50A     $\phi$ 24



MAX 100A     $\phi$ 24



MAX 200A     $\phi$ 40



MAX 500A     $\phi$ 40



MAX 1000A     $\phi$ 68

### ● KEW 6305 Specification

Wiring connections	1P2W, 1P3W, 3P3W, 3P3W3A, 3P4W
Measurements	Voltage, Current, Frequency, Active power
Parameters	Apparent power, Reactive power, Active energy, Apparent energy, Reactive energy, Power factor (cos $\theta$ ), Neutral current
Voltage range	<b>TRUE RMS</b> 150.0/300.0/600.0V
Voltage accuracy	$\pm 0.2\%rdg \pm 0.2\%f.s.$ (sine wave, 45 to 65Hz)
Current range	<b>TRUE RMS</b> 10.00/50.00/100.0/250.0/500.0A/Auto (with clamp sensor 8125)
Current accuracy	$\pm 0.2\%rdg \pm 0.2\%f.s.$ + Accuracy of Clamp sensor (sine wave, 45 to 65Hz) *+1%f.s. at the lowest range.
Effective input range	10 to 110% of rating range
Display range	5 to 130% of each range (Voltage) 1 to 130% of each range (Current)
Crest factor	Voltage : 2.5 or less, Current : 3.0 or less (1.4Vpeak max.)
Active power accuracy	$\pm 0.3\%rdg \pm 0.2\%f.s.$ + Accuracy of Clamp sensor *+1%f.s. when the lowest current ranges is selected. *When measuring 3P3W system with 3P3W3A setting, distorted voltage or current may cause reading error in proportion to the magnitude of each distortion.
Effect of power factor	Active power: $\pm 1.0\%rdg \cos \theta = \pm 0.5$ (PF=1)
Frequency meter range	40.0 to 70.0Hz
Frequency meter accuracy	$\pm 3dgt$
Accuracy precondition	PF=1, Sine wave, 45 to 65Hz, 23°C $\pm 5^\circ C$
Display update period	1 second
Operating temperature and humidity range	0 to +50°C, relative humidity 85% or less (no condensation)
Storage temperature and humidity range	-20 to +60°C, relative humidity 85% or less (no condensation)
Communication interface	USB, Bluetooth® 5.0 <sup>1</sup>
PC card interface	SD card (2GB)
Safety standard	IEC 61010-1 CAT III 600V, IEC 61326
Power source (AC Line)	100 to 240V $\pm 10\%$ (45 to 65Hz)
Power source (DC battery)	LR6 or Ni-MH (HR-15-51) x 6 (Battery charger not included), Battery life approx. 15h (LR6)
Power consumption	10VA max
Dimension	175 (L) x 120 (W) x 65 (D) mm
Weight	Approx. 800g (including batteries)
Accessories	7141B (Voltage test lead set), 7148 (USB cable), 7170 (Power cord[EU]) or 7240 (Power cord[UK]), 9125 (Carrying case), 8326-02 (SD card[2GB]), Batteries, Quick manual
Optional accessories	8124, 8125, 8126, 8127, 8128 (Load current Clamp Sensor), 8130, 8133, 8135 (Flexible clamp sensor), 8312 (Power supply adapter), 9132 (Carrying case with magnet)

<sup>1</sup> Some countries regulate the compliance with their Radio Law of the products equipped with Bluetooth®. Please confirm it with your distributor before purchasing our products equipped with Bluetooth®.



## Safety Warnings :

Please read the "Safety Warnings" in the instruction manual supplied with the instrument thoroughly and completely for correct use. Failure to follow the safety rules can cause fire, trouble, electrical shock, etc. Therefore, make sure to operate the instrument on a correct power supply and voltage rating marked on each instrument.

## ■ For inquiries or orders :

### Load current flexible clamp sensors

KEW 8135    KEW 8130    KEW 8133



MAX 50A     $\phi$ 75



MAX 1000A     $\phi$ 110



MAX 3000A     $\phi$ 170

Before connecting with sensors KEW 8133 or KEW 8135, confirm that the internal firmware version is later than the one listed in the table below.

MODEL	Firmware version
KEW 8133	V1.10 or later
KEW 8135	V2.00 or later

The latest firmware is available on our website.

When using sensor KEW 8135, confirm the serial number of the tester KEW 6305 is later than that is listed in the table below.

Supported serial numbers	8369312 or later
--------------------------	------------------

If your KEW 6305 has an earlier serial number than the one listed above, accuracy will not be guaranteed when two or more KEW 8135 are connected with KEW 6305.

### Distribution board door can be closed during measurement?

KEW 6305 facilitates safe testing thanks to its extreme compact design and with two attractive optional accessories: a carrying case with magnet for attaching it to the sides of metal enclosures and a power supply adapter which takes the power for the instrument from the supply being measured.

### Power supply adapter

#### MODEL 8312

For taking single phase supply (100 to 240V) from the test leads to power the instrument



### Carrying case with magnet

#### MODEL 9132

For mounting inside metal distribution boards



**COSINUS Messtechnik - Ihr Partner für Messlösungen  
in allen elektrischen und physikalischen Anwendungen**

**COSINUS Messtechnik GmbH**

Rotwandweg 4

82024 Taufkirchen

Tel.: 089 / 66 55 94 - 0

Fax: 089 / 66 55 94 -30

[office@cosinus.de](mailto:office@cosinus.de)  
[www.cosinus.de](http://www.cosinus.de)