COSINUS® MESSTECHNIK GMBH

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: ±0.3%rdg±0.2%f.s.*
- *Automatic wiring check function to prevent incorrect connections*
- *Large memory capability (2 GB) 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 recoginition 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

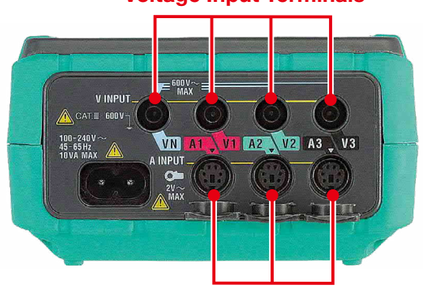
Shows "Good"

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.



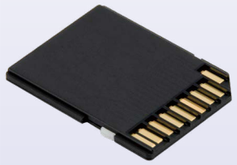
Data can be saved on SD card or transferred to a PC

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. USB ver. 2.0 is supported.

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

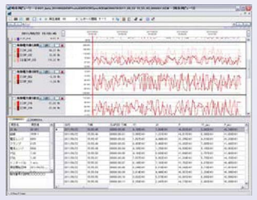
*in case the SD card is empty

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.

Windows software 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_2 equivalent values in the report.

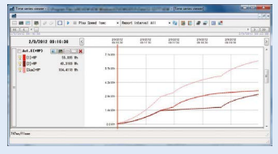


【System requirements】
OS: Windows® 11/10
Display: XGA(Resolution 1024×768 dots) or more
Required hard-disk space: 1Gbyte or more
Other: With CD-ROM drive and USB port
.NET Framework (4.6.1 or later)
* Windows® is a registered trademark of Microsoft in the United States.

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.

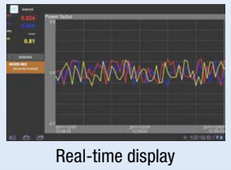


Combined values will be displayed on a graph in real-time.

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

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.

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 (cosθ), 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.

Optional Accessories

Load current clamp sensors

MODEL 8128 MODEL 8127 MODEL 8126 MODEL 8125 MODEL 8124

MAX 50A ϕ24 | MAX 100A ϕ24 | MAX 200A ϕ40 | MAX 500A ϕ40 | MAX 1000A ϕ68

Load current flexible clamp sensors

KEW 8135 KEW 8130 KEW 8133

MAX 50A ϕ75 | MAX 1000A ϕ110 | MAX 3000A ϕ170

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 θ), Neutral current
Voltage range TRUE RMS	150.0/300.0/600.0V
Voltage accuracy	±0.2%rdg±0.2%f.s. (sine wave, 45 to 65Hz)
Current range TRUE RMS	10.00/50.00/100.0/250.0/500.0A/Auto (with clamp sensor 8125)
Current accuracy	±0.2%rdg±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 (with 90%f.s. or less)
Active power accuracy	±0.3%rdg±0.2%f.s.+ Accuracy of Clamp sensor *+1%f.s. when the lowest current ranges is selected.
Effect of power factor	Active power: ±1.0%rdg cos θ=±0.5 (PF=1)
Frequency meter range	40.0 to 70.0Hz
Frequency meter accuracy	±3dgt
Accuracy precondition	PF=1, Sine wave, 45 to 65Hz, 23℃±5℃
Display update period	1 second
Operating temperature and humidity range	0 to +50℃, relative humidity 85% or less(no condensation)
Storage temperature and humidity range	-20 to +60℃, relative humidity 85% or less(no condensation)
Communication interface	USB, Bluetooth®
PC card interface	SD card (2GB)
Safety standard	IEC 61010-1 CAT Ⅲ 600V, IEC 61326
Power source (AC Line)	AC100 to 240V±10% (50/60Hz)
Power source (DC battery)	LR6 or Ni-MH (HR-15-51)×6 (Battery charger not included), Battery life approx. 15h (LR6)
Power consumption	10VA (max.)
Dimension Weight	175 (L)×120 (W)×65 (D)mm 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 for KEW 6305, KEW 6305-01), 9135 (Carrying case for KEW 6305-03, KEW 6305-05), 8326-02 (SD card[2GB]), KEW Windows (PC Software), Battery (LR6)×6, 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)

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

Kits

KEW 6305-01
MODEL 8125 (500A) × 3
(Carrying case 9125)

KEW 6305-03
KEW 8130 (1000A) × 3
(Carrying case 9135)

KEW 6305-05
KEW 8133 (3000A) × 3
(Carrying case 9135)

Photo: 6305-03

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.

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

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