

LOGGERS

KEW 5010/5020



TRUE RMS USB External Power Supply

3 channel inputs for the simultaneous recording of Leakage Current, Load Current and Voltage

Power Quality analysis. (only on KEW 5020)

(Power Quality: Reference voltage, Swell, Dip, Short power Interruptions)

Large capacity for storing 60,000 data points

60,000 data points can be recorded when 1ch is used, and when all the three channels are used, 20,000 data points per channel can be recorded.

Lowpass Filter will filter out the harmonics.

(Cutoff Frequency = Approx. 160Hz)

LED flickers when the preset current / voltage value is exceeded.

(Available for Trigger / Capture Recording, Power Quality Analysis modes)

CALL : Confirmation of recorded data

- The following can be displayed: number of recorded data points, (max+ min+ peak) value for each channel complete with time/date information in the Normal recording mode. (Detected values (i.e. when values are outside preset limits) can be displayed in other recording modes)
- RECALL: The last 10 recorded data points including time/date can be recalled on the logger display.



Selection of One-time mode or Endless mode

One-time on : →

Recording will stop when memory is used up.

One-time off : ↻

Overwrite the old data, and store the latest data.

Non Volatile Memory

Recorded data will be retained even if the batteries are exhausted or replaced due to the presence of a nonvolatile memory (guaranteed for 10 years)

Battery power indicator

Indicates battery voltage in 4-levels.

(It is possible to use the logger for a further approx 24 hours even after the warning symbol is flashing.)

The user friendly PC software "KEW LOG Soft" is supplied.

- Supplied with the user friendly software "KEW LOG Soft 2".
- This permits editing, analysis and graphical display of data.
- The recorded data is downloadable onto a PC via USB cable.
- Variation of the measured voltage and current data can be confirmed simultaneously on the PC display monitor. (only on KEW 5020)
- Simplified Power Integration
(The "KEW LOG Soft 2" uses current and voltage recorded to calculate the integral power consumption)
- Continuous measuring time : Approx. 10 days (Alkaline Battery)

	5010	5020
Recording mode	Normal, Trigger, Capture	Normal, Trigger, Capture, Power quality analysis
Operating system	Successive approximation(CH1 single synchronized sampling)	
Rated max. working voltage	AC9.9Vrms, 14V peak value	
Number of input channel	3ch	
Measuring method	True RMS	
RMS measuring interval	approx. 100ms.	
Sampling interval	: Normal / Trigger mode	approx. 1.65ms/CH
	: Capture mode	approx. 0.55ms (waveform: at every 1.1ms)
	: P.Q.A mode	—
		approx. 0.55ms
Low battery warning	Battery mark display (in 4 levels)	
Over-range indication	"OL" mark is displayed when exceeding the measuring range	
Auto power off	Power-off function operates automatically after a switch remains for 3min. (when recording is stopped)	
Location for use	Indoor use, Altitude up to 2000m	
Operating temperature & humidity range	-10°C - 50°C / Relative humidity 85% or less (no condensation)	
Battery	LR6(AA)(1.5V) × 4 / External supply DC9V(Special AC Adaptor)	
Possible measurement time	Approx.10days (with alkaline LR6 batteries)	
Applicable Standards	IEC 61010-1 CAT III 300V Pollution degree2 IEC 61326 (EMC)	
Dimensions	111(L) × 60(W) × 42(D)mm	
Weight	Approx. 265g	
Accessories	LR6(AA) × 4 9118(Carrying case[Soft]) KEW LOG Soft 2(PC software) 7148(USB cable) Instruction manual Quick manual Install manual USB Notice sheet	
Optional	8146/8147/8148(Leakage & Load current clamp sensor) 8121/8122/8123(Load current clamp sensor) 8129(Flexible clamp sensor) 8309(Voltage sensor : only KEW5020) 8320(AC adaptor) 9135(Carrying case) 7185(Extension cable)	

Normal Recording Mode

(AC 50/60Hz, Sine wave, Input: 10% or more of the range at CH1)

Range	RMS Accuracy
100.0mA	±2.0%rdg±0.9%f.s. + Accuracy of sensor
Other ranges	±1.5%rdg±0.7%f.s. + Accuracy of sensor
Crest factor	2.5 or less :RMS accuracy(sine)+ 2%rdg+1%f.s.

*Max, Min and Instant Peak values in Normal Recording mode are just reference values; their accuracies aren't guaranteed.

Trigger Recording Mode

(AC 50/60Hz sine wave)

Range	Accuracy
100.0mA	±3.5%rdg±2.2%f.s. + Accuracy of sensor
Other ranges	±3.0%rdg±2.0%f.s. + Accuracy of sensor

Capture/ Power Quality Analysis Recording Mode

Range	Accuracy
100.0mA	±3.0%rdg±1.7%f.s. + Accuracy of sensor
Other ranges	±2.5%rdg±1.5%f.s. + Accuracy of sensor

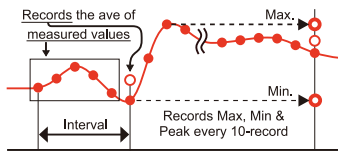
4 recording modes make various measurements possible



Normal recording mode

For monitoring power line status or an intermittent leakage.

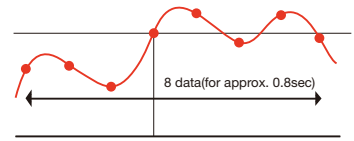
- Records the variation of the current / voltage in a given interval (For monitoring the variation of the current / voltage against time.)
- A choice of 15 recording intervals are available: 1 sec. to 60 min. (1,2,5,10,15,20,30 sec, 1,2,5,10,15,20,30,60 min.)
- The average of the measured value in every recording interval is recorded. The Max., Min. and Peak values (sampled crest value converted to sine RMS value) are recorded every 10 readings.



Trigger recording mode

For observing an irregular operation of an ELCB/RCD, an irregular current / voltage.

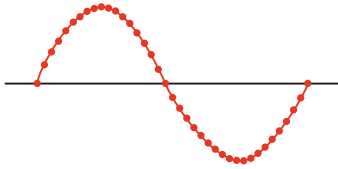
- Detects the value, time and frequency of the current / voltage when the preset value is exceeded.
- When the detection level (i.e. preset value) is exceeded, 8 data points (True RMS values for approx. 0.8 sec) and peak value are recorded before and after the preset value is exceeded.
- Inrush current or an abnormal current / voltage can be detected by sampling the inputs at every 1.6ms.
- LED flickers when the measured values exceed the preset current / voltage value.



Capture recording mode

For observing waveforms easily.

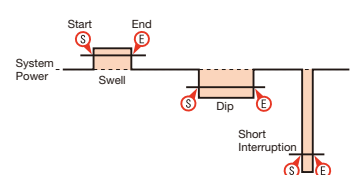
- Waveform display via a PC by sampling the inputs every 0.55ms.
- When the preset current / voltage value is exceeded, instantaneous values are recorded for 200ms (from 10(50Hz) to 12 (60Hz) waveforms) before and after preset value is exceeded.
- LED flickers when the measured values exceed the preset current / voltage value.



Power Quality Analysis Mode

For monitoring and observing voltage fluctuations.

- Detects the reference voltage, Swell, Dip and Short Interruption. Records the values detected with the start time and end time.
- Samples the inputs every 0.55ms and detects the voltage fluctuation every 10ms.
- LED flickers when the voltage fluctuation is detected.



Analyzing and processing the recorded data with a PC

The user friendly PC software "KEW LOG Soft 2" is supplied.

Software is Enhanced!

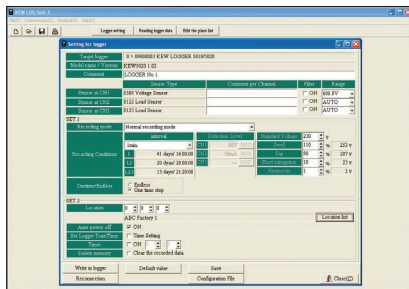
System requirements

OS: Windows® Vista/7/8/10
 Display: XGA(Resolution 1024 x 768 dots) or more

Hard-disk: Space required 100Mbyte or more
 Others: With CD-ROM drive and USB port
 * Windows® is a registered trademark of Microsoft in the United States.



Easy to set up with a PC



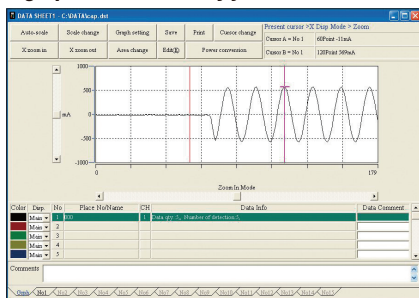
(Normal and Trigger recording modes can be set up through the logger itself.)

Large data can be easily processed

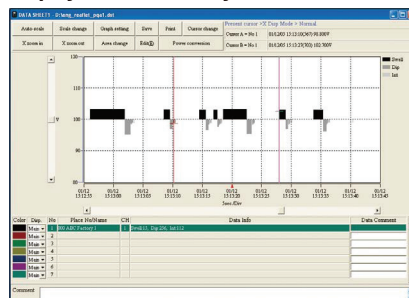
Time	Max	Min	Peak
11:00:00	11.01	0.00	0.00
11:00:05	11.01	0.00	0.00
11:00:10	11.01	0.00	0.00
11:00:15	11.01	0.00	0.00
11:00:20	11.01	0.00	0.00
11:00:25	11.01	0.00	0.00
11:00:30	11.01	0.00	0.00
11:00:35	11.01	0.00	0.00
11:00:40	11.01	0.00	0.00
11:00:45	11.01	0.00	0.00
11:00:50	11.01	0.00	0.00
11:00:55	11.01	0.00	0.00
11:01:00	11.01	0.00	0.00
11:01:05	11.01	0.00	0.00
11:01:10	11.01	0.00	0.00
11:01:15	11.01	0.00	0.00
11:01:20	11.01	0.00	0.00
11:01:25	11.01	0.00	0.00
11:01:30	11.01	0.00	0.00
11:01:35	11.01	0.00	0.00
11:01:40	11.01	0.00	0.00
11:01:45	11.01	0.00	0.00
11:01:50	11.01	0.00	0.00
11:01:55	11.01	0.00	0.00
11:02:00	11.01	0.00	0.00

- The type of the sensor connected to the logger will be automatically recognized.
- Just click appropriate dialog boxes for set up if it is not required to input any comments.
- By using commercially available USB hub, multiple loggers can be connected to a PC and can set the synchronized time.

A graph can be made by just one click



Display of Power Quality



Capable of registering the names of 1,000 sites

