



Quality and reliability is our tradition

KYORITSU

Ior LOGGER KEW 5050

Unprecedented Ior Logger!

Quickly find electric leakages with less time and more productivity



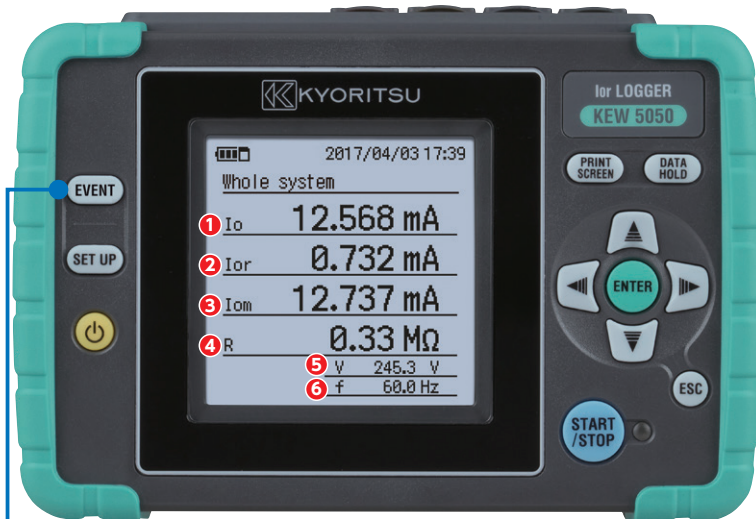
Clamp sensors
in two different jaw sizes



- Provides simultaneous measurements and logs up to 4 channels
- Supports various wiring systems (Single-phase 2&3-wire, Three-phase 3&4-wire*)
*Except Ior for 3 Phase 4 wire
- World's fastest class speed at 200ms interval for leakage current measurement
- Large graphic display and magnet on the back case to attach it on metal enclosures
- Offers both traditional leakage / load current measurements

KYORITSU ELECTRICAL INSTRUMENTS WORKS, LTD.

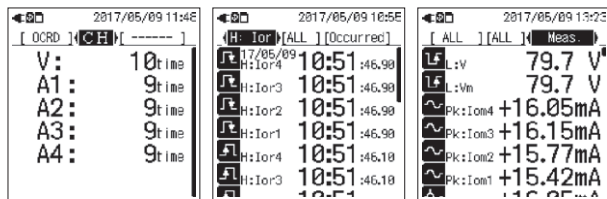
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- 1 Io Leakage current (1st-order component of Iom)
- 2 Ior Resistive leakage current
- 3 Iom Leakage current with harmonics
- 4 R Insulation resistance (determined by V and Ior)
- 5 V Reference voltage (1st-order component of Vm)
- 6 f Frequency

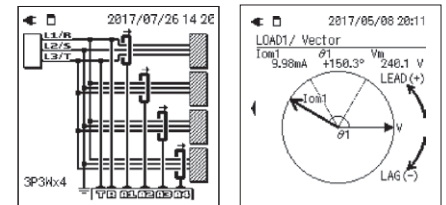
EVENT Quickly displays occurred events

Detailed information on the occurred events are displayed on the LCD. Different threshold values can be set for each channel and each event.



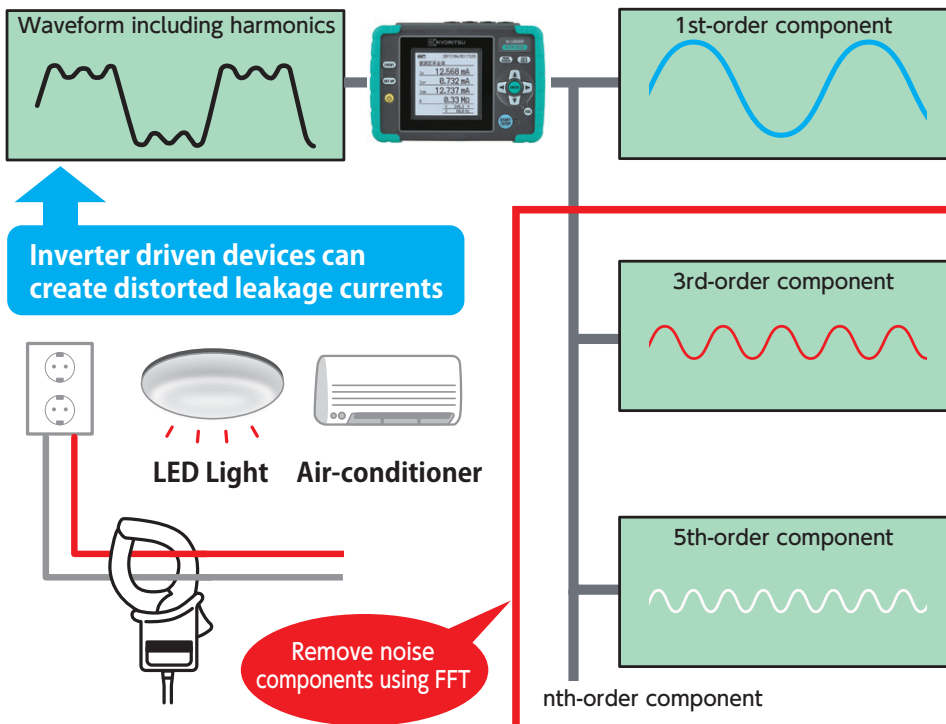
Various display modes

User-friendly graphical display of connections and phase differences.



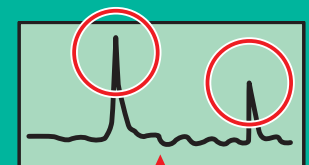
New measurement method with FFT

Offering accurate Ior measurement without being affected by noises or harmonics



Never miss intermittent leakages
Gapless continuous measurement

During logging, continuous high-speed sampling (24.4 μ sec) without gaps is performed. This allows recording of any intermittent leakage without missing it as an event or maximum value.



KEW 5050 surpasses traditional Ior testers and can record intermittent leakages.

Unlike to traditional Ior measuring apparatus, less susceptible to harmonics noises.

Successfully achieving logging with no effects of harmonics by TRMS calculation every 200 ms using FFT (Fast Fourier Transform).

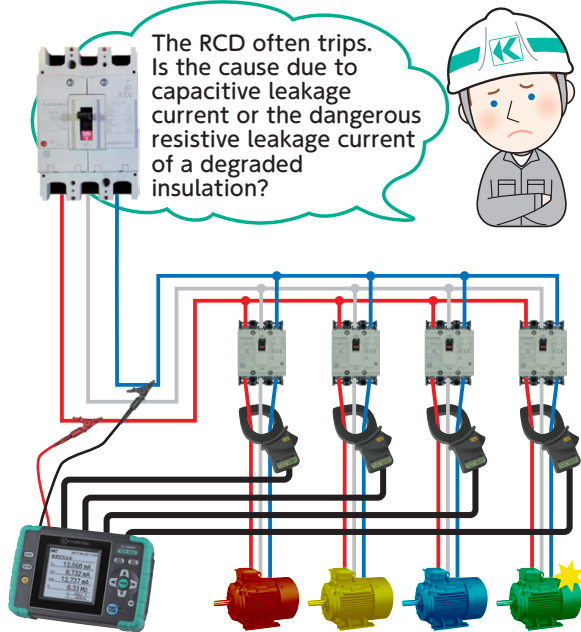
* KEW 5050 cannot measure Ior on different wiring systems at once, nor on V-connection with different capacities and flowing power supply (not connected to earth ground).

Tests and records 4 channels simultaneously in 200 ms gapless

Can measure up to 4 channels simultaneously!

Best to diagnose unwanted RCD tripping

Measures Ior and Ioc separately to clarify the root cause of the electric leakage troubles.



Accessories and optional parts

Optional Power supply adapter is available to derive power via measurement terminal.

Cable markers for easy recognition



USB terminal

Allows connection with PC and access to SD card



Digital output

Activates alarm devices when events occur



Strong magnets help to fix KEW 5050 to the metal distribution board.

SD card interface

Achieves long period of data logging. In case of sudden power interruption, data stored in the SD card aren't lost.

Possible recording time (with 2GB SD card)

Interval	REC item		
	1P3W×1	1P3W×4	3P4W×4
200ms	25days	8days	7days
1sec.	38days	11days	9days
2sec.	76days	22days	18days
5sec.	6.5months	1.8months	1.5months
15sec.	1year or more	5months	4months
30sec.		11months	9months
1min. or more		1year or more	

Special data analysis software "KEW Windows for KEW 5050"

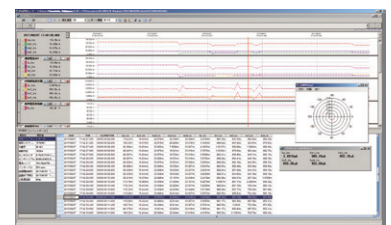
Automatic generation of graphs and lists based on the recorded data by just one click.

Data can be checked without using this software by changing the file extension to csv or others.



Please download the software from our website.

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



● KEW 5050 Specification

Wiring configuration	1P2W, 1P3W, 3P3W, 3P4W
Measurements and parameters	Ior : Leakage current (TRMS) with resistive components only Io : Leakage current (TRMS) with basic wave of 50/ 60Hz only Iom : Leakage current (TRMS) including harmonic components V : Reference voltage (TRMS) with basic wave of 50/ 60Hz only Vm : Reference voltage (TRMS) including harmonic components R : Insulation resistance, Frequency(Hz), Phase angle(θ)
Other functions	Digital output, Print screen, Backlight, Data hold
Recording Interval	200/400ms/1/5/15/30s/1/5/15/30/60/120m
Ior	
Range	10.000/100.00/1000.0mA/10.000A/AUTO
Accuracy	For reference voltages of sine wave 40 to 70Hz and 90V TRMS or higher, $\pm 0.2\%rdg \pm 0.2\%f.s.$ + clamp sensor amplitude accuracy + error of phase accuracy* (phase error) * add $\pm 0.2\%rdg$ to measured Io value when using Ior leakage clamp sensor. (θ : within the accuracy of reference voltage/ current phase difference $\pm 1.0^\circ$)
Allowable input	1 to 110% (TRMS) of each range, and 200% (peak) of the range
Display range	0.15 to 130% (display "0" for less than 0.15%, "OL" if the range is exceeded)
Io	*Range, Allowable input and Display Range are the same as Ior
Accuracy	$\pm 0.2\%rdg \pm 0.2\%f.s.$ + clamp sensor amplitude accuracy
Iom	*Range, Allowable input and Display Range are the same as Ior
Accuracy	$\pm 0.2\%rdg \pm 0.2\%f.s.$ + clamp sensor amplitude accuracy
Measurement method	Sampling speed 40.96ksps (every 24.4 μ s), gapless, calculate TRMS values every 200ms.
Voltage	
Range	1000.0V
Accuracy	$\pm 0.2\%rdg \pm 0.2\%f.s.$ * for waveforms of sine wave 40 to 70Hz
Allowable input	10 to 1000V TRMS, and 2000V peak
Display range	0.9 to 1100.0V TRMS (display "0" for less than 0.9V, "OL" if the range is exceeded)
Phase angle(θ)	
Display range	0.0 to $\pm 180.0^\circ$ (regarding the phase of reference voltage as 0.0°)
Accuracy	Within $\pm 0.5^\circ$ for the inputs of 10% or higher of leakage current range, sine wave 40 to 70Hz reference voltage of 90V TRMS or higher. Within $\pm 1.0^\circ$ when using Ior leakage clamp sensor, and Within $\pm 0.5^\circ$ + clamp sensor accuracy when using general purpose clamp sensor.
Frequency meter range	40 to 70Hz
External supply	100 to 240 AC(50/60Hz) 7.5VAmx

Power source	LR6(AA)(1.5V) $\times$ 6 (Battery life approx. 11 h)
Display / update period	160 $\times$ 160 dots, FSTN monochrome display / 500ms
PC card interface	SD card (2GB) *standard accessory
Communication interface	USB
Temperature and humidity range	23 $\pm$ 5 $^\circ$ C, relative humidity 85% or less(no condensation)
Operating temperature and humidity range	-10 to 50 $^\circ$ C, relative humidity 85% or less(no condensation)
Storage temperature and humidity range	-20 to 60 $^\circ$ C, relative humidity 85% or less(no condensation)
Applicable standards	IEC 61010-1 CAT IV 300V / CAT III 600V Pollution degree 2 IEC 61010-2-030, IEC 61010-031, IEC 61326
Dimension/Weight	165(L) $\times$ 115(W) $\times$ 57(D)mm/Approx. 680g (including batteries)
Accessories	7273(Voltage test lead) 8262(AC adapter) 7278(Earth cable) 7219(USB cable) 8326-02(SD card [2GB]) 9125(Carrying case) Instruction manual, Cable marker Batteries
Optional accessories	8177(Ior Leakage current clamp sensor 10A type ϕ 40mm) 8178(Ior Leakage current clamp sensor 10A type ϕ 68mm) 8329(Power supply adapter) 8146, 8147, 8148 (Leakage & Load current clamp sensor) 8130, 8133 (Flexible clamp sensor) 8121, 8122, 8123 (Load current clamp sensor) 8124, 8125, 8126, 8127, 8128 (Load current clamp sensor)

Shows insulation resistance (R) values determined by the following formula.
 V: Reference voltage/ Ior: Leakage current
 Displayed value is just for reference since the measurement method differs from insulation resistance testers and may not be consistent with each other.
 In case of 3P3W and 3P4W, for a correct Ior reading, the capacitance effect of each phase must be equal.

Accessories



MODEL 7273
Voltage test lead
3000mm



MODEL 8262
AC adapter



MODEL 7278
Earth cable
1500mm



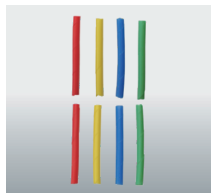
MODEL 7219
USB cable
1500mm



MODEL 8326-02
SD card [2GB]



MODEL 9125
Carrying case



Cable marker

Optional accessories



KEW 8178
Ior leakage current
clamp sensor 10A
type ϕ 68mm(3m)



KEW 8177
Ior leakage current
clamp sensor 10A
type ϕ 40mm(3m)



MODEL 8329
Power supply adapter



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 :



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