MULTIFUNCTION POWER & HARMONICS ANALYZER
Model - KM 2100 / KM 2200



KM 2100 & KM 2200 Power Quality Analyser is the professional portable device to measure & analyse the power system quality, provide the harmonics analysis & power quality data analysis, also provide big memory for the data storage, which is used to analyze the power system parameters.

The PC software can upload the data to PC for full analysis.

- ✶ **Display :** Run Chart, Bar Chart, Vector Graphic, Waveform, Event List, Readings, Trend, Dips & Swells
- ✶ **Display :** 5.6' TFT LCD, 320 X 240 Adjustable brightness.
- ✶ **Display Mode :** Wave form display, Phasor Display, Table Display
- ✶ **Distortion Factor (KM 2100)**
- ✶ **Voltage & Current Unbalance (KM 2100)**
- ✶ **Active, Reactive & Apparent Energy (KM 2100)**

✶ FEATURES :

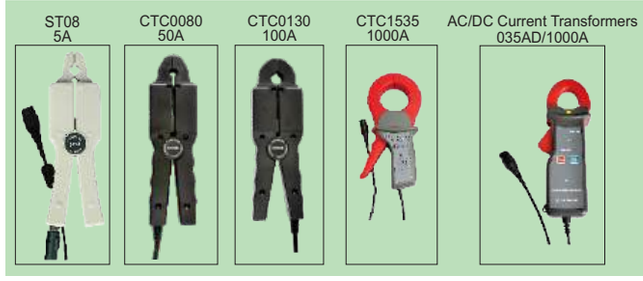
- **Safety :** CAT III 1000V / CAT IV 600V; Pollution Degree 2
- **Standards :** IEC61000-4-30 (2008) S class, EN50160 (2007).
- **Easy operation to capture the power quality problem.**
- **Single-phase 2W / Single-phase 3W / 3-phase 3W / 3-phase 4W.**
- Flash memory 128MB
- **Built in TF Card 8G Memory Card for long-term measuring data storage.**
- **Support USB port to connect to PC and analyze the data / screen shots copied by U-disk.**
- **Support LAN port to make the remote control available, transfer the measuring data.**
- **Volts / Amps. / Hertz, Dips & Swell, Power / Energy, Unbalance, Monitor, Scope, Harmonic, Logger & Interruption functions. (KM 2200)**
- **Protection shield, strong.**
- **IP :** IP51, accords IEC60529
- **Electrical Safety comply with :** IEC61010-1
- **Dimension :** 262 x 173 x 66mm
- **Weight :** Approx. 1.6kg.

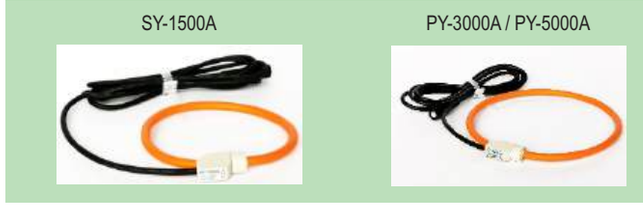
- **Standard Accessories**



- **Optional Accessories :**

CT Clamps 5A / 50A / 100A / 1000A / 1500A / 3000A / 5000A.





✶ ACCESSORIES :

- **Voltage Test Lead 2 meters long x 5, Alligator Clips x 5, External DC Adaptor, Hang Strap, Software CD, User Manual & Carrying case.**

✶ OPTIONAL ACCESSORIES :

- **Current Clamp 5A to 5000Amps.**

VOLTAGE / CURRENT / FREQUENCY

Functions		Range	Resolution	Accuracy
Vrms(AC+DC)		1 ~ 1000Vrms	0.1 Vrms	±0.5% of nominal voltage
Vpk		1 ~ 1400Vpk	0.1 Vpk	±0.5% of nominal voltage
V(Crest Factor)		1.0 ~ >2.8	0.01	± 5%
Arms (AC)	10mV/A	0 ~ 100A	0.1A	±0.5% ± 0.2A
	1mv/A	1 ~1000A	0.1A	±0.5% ± 0.2A
	50mV (65mV)/ 1000A	15 ~ 5000A	1A	±1% ± 2A
A(Crest Factor)		1 ~ 10	0.01	± 5%
Frequency KM 2100 / KM 2200		42.5 ~ 57.5Hz (50Hz nominal)	0.01Hz	± 0.01Hz
		51 ~ 69Hz (60Hz nominal)	0.01Hz	± 0.01Hz
KM 2100 only		385 ~ 414Hz (400Hz nominal)	0.01Hz	± 0.1Hz

POWER AND ENERGY

Functions	Range	Resolution	Accuracy
Active Power	1.0 ~ 20.00 MW	0.1KW	± 1.5 ± 10 counts
Apparent Power	1.0 ~ 20.00 MW	0.1KW	± 1.5 ± 10 counts
Reactive Power	1.0 ~ 20.00 MW	0.1KW	± 1.5 ± 10 counts
Kwh	0.00 kWh ~ 200 GWh	10Wh	± 1.5 ± 10 counts
Power Factor	0 ~ 1	0.01	± 0.03
Displacement Power Factor	0 ~ 1	0.01	± 0.03

FLICKER (KM 2100)

Functions	Range	Resolution	Accuracy
Pst (1min), Pst, Plt, PF5	0.00 ~ 20.00	0.01	Within ± 5% of table value according to IEC61000-4-15

VOLTAGE TRANSIENT (KM 2100)

Functions	Range	Resolution	Accuracy
Vpk	6000Vpk	1 V	± 15 %
Vrms	10 ~ 1000Vrms	1 V	± 2.5 %
Min. Test Time	50 us	——	——
Sampling Rate	20 kS / s	——	——

LOGGER

Functions	Range
Recording	User-defined parameters for 4 phases at the same time
Memory	Data stored in TF Card, 8GB
Duration time	2hrs to 1 year
Interval	1s to 1 hrs

DISTORTION FACTOR (KM 2100)

Functions	Range	Resolution	Accuracy
THD	0.0 ~ 100.0%	0.1%	± 2.5%

UNBALANCE

Functions	Range	Resolution	Accuracy
Voltage	0.0 ~ 5.0%	0.1 %	± 0.5 %
Current	0.0 ~ 20.0%	0.1 %	± 1 %
Voltage Phase	-360° ~ 0°	1°	± 2 counts
Current Phase	-360° ~ 0°	1°	± 5 counts

DIPS AND SWELLS

Functions	Range	Resolution	Accuracy
Vrms 1/2	0 ~ 200% of nominal Voltage	0.1 Vrms	± 1 %
Arms 1/2	1 ~ 3000% A	1A	± 1 % ± 2A
Threshold levels	Thresholds is settable according to nominal voltage percentage Detectable events type : Dips, Swells, Interruption, Voltage Rapid Change		
Duration	hour-minute-second-microsecond	0.5 cycle	1 cycle

HARMONIC

Functions	Range	Resolution	Accuracy
Harmonic Number	1 ~ 50	——	——
Inter-Harmonic (KM 2100)	1 ~ 49	——	——
Harmonic Voltage	0.0 ~ 100.0 %	0.1 %	± 0.1 % ± nx0.1 %
Harmonic Current	0.0 ~ 100.0 %	0.1 %	± 0.1 % ± nx0.1 %
THD	0.0 ~100.0%	0.1 %	± 2.5 %
DC Relative	0.0 ~ 100.0 %	0.1 %	± 0.2 %
Frequency	0 ~ 3500Hz	1Hz	1Hz
Phase	-360° ~ 0°	1°	± nx1.5°

INRUSH CURRENT (KM 2100)

Functions	Range	Resolution	Accuracy
Arms (AC + DC)	0 ~ 3000 Arms	0.1	± (1 % ± 5 counts)
Inrush Duration	6s ~ 32min selectable	10 ms	± 20 ms

GENERAL SPECIFICATIONS

Interface (USB Host)	download file to PC by U disk for analyze with PC software
Lan	For remote control of the Analyzer & measurement data transmission.
Working Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Humidity	90% relative humidity
Power Supply	
Adapter input	90 ~ 264V
Adapter output	12V 2A
Battery	Rechargeable Ni-MH 7.2V 3.8Ah
Battery working time	> 7 hours
Battery charge time	6 hours

Sampling System	
Resolution	8 channels 16 bits AD
Sampling Rate	20kS/s for each channel, 8 channels sample synchronously
RMS Sampling	5000 points for 10/12 cycles (according to IEC 61000-4-30)
PLL Sync	4096 points for 10/12 cycles (according to IEC61000-4-7)
Current Input	
Number of Input	4 (3 phase + neutral) DC coupling
Type	Clamp current sensor with mV output
Input Range	1 to 5000 Arms with supplied current clamps
Input Impedance	50kΩ
Bandwidth	>3kHz