



ISO 9001:2000, BS EN 9001  
APPROVED BY BVQI

# Compact Power Meter

**TRUERMS**



**NEW**



- All necessary Power Measurements : V, A, W, VA, Var, Wh, VAh, Varh, cos  $\theta$ , In, Hz.
- Recording function with "integration time" selectable from 1 second to 1 hour.
- Internal non volatile Memory for non-stop recording up to 10 days.
- Accepts Removable Compact Flash Memory up to 128MB for non-stop recording up to 5 years.
- Supplied with interface software for downloading data to PC via USB.
- Four wiring configurations : 3 Phase 4 Wires, 3 Phase 3 Wires, single Phase 3 Wire and 2 Wires.
- Wide screen with back light Multi-Display system for simultaneous measurements.
- Double power supply system : from AC Line and from Alkaline battery with approx. 7 hours of battery life.
- Demand function for Energy-Saving measurements.
- Designed to Safety Standard IEC 61010-1 CAT. III 600V.

**POWER METER**

**MODEL 6300**

# Everything Required for Power Consumption

## 12 kinds of power measurements

Voltage (RMS), Current (RMS), active power, apparent power, reactive power, active energy, apparent energy, reactive energy, power factor (Cos θ), frequency, demand measurement, current flowing on the neutral line (Only on 3 phase 4 wire measurement)

## Regenerative electric power

Detection of consumption power and regenerative power. Regenerative electric power: This is the electric power supplied to electric power company.

## The electric power and the power factor for each phase can be confirmed

Monitoring of operation for each phase.

## Recording and 1 hour

1/2/5/10/15/20



## Demand measurement

Buzzer sounding and backlight blinking give warning not to exceed the pre-setting demand target value.

## Double power supply system AC line and Alkaline size AA battery LR6 : 6 pcs.

Continuous 7 hours can be measured by using batteries

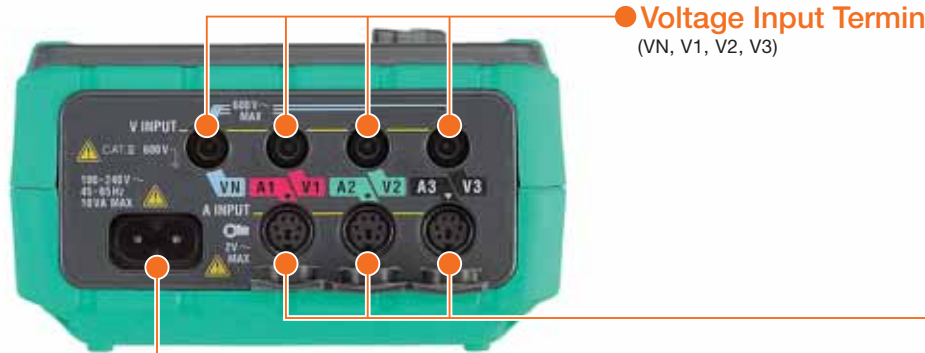
## Display 3 different data simultaneously on large screen.

## 4 types wiring system

- 1 phase - 2 wire (1ch), (2ch), (3ch)
- 1 phase - 3 wire
- 3 phase - 3 wire
- 3 phase - 4 wire

**Function Switch**  
Easy operation with big range switch.

**LED status indicator**  
Lighting : During integration / demand measurement.  
Blinking : During integration / demand stand-by mode.



**Voltage Input Terminal**  
(VN, V1, V2, V3)

**Power connector**



**Display (LCD)**



**Back Light Switch**

**Cursor Key**

**Saving Key**

Instantaneous value can be saved.

**Start Stop Key**

# Consumption and Energy-Saving Analysis!!

## Power can be measured

Generative electric power  
Electric power which is generated by private power generator, and is

## Measurement interval can be set between 1 second and 30 minutes

1/30 second/seconds 1/2/5/10/15/20/30 minute/minutes 1 hour

als



Clamp Sensor (option)  
**MODEL 8125**

- Current Input Terminals (A1, A2, A3)

## Direct communication with PC by USB connection

- USB Connector

## The interface for compact flash card (CF card) is equipped.

An external memory up to 128MB or less can be used.

- CF Card Slot
- CF Card Eject Button

### CF card (operation check has completed)

Supplier	Model	Capacity
SanDisk Corporation	SDCFB-32	32MB
	SDCFB-364	64MB
	SDCFB-128	128MB
Renesas Technology Corporation	HB28B128C8C	128MB
Adtec Co., Ltd.	AD-CFG32	32MB
BUFFALO Inc.	RCF-X32MY	32MB
	RCF-X64MY	64MB
	RCF-X128MY	128MB

Company name and model name are the trademark or the registered trademark.

### Max number of data (reference)

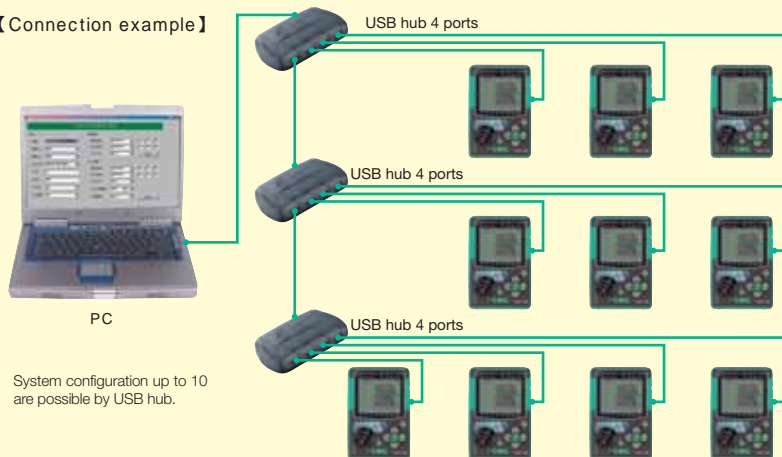
Data saved in:	CF card				Internal memory
	32MB	64MB	128MB	128kB	
Capacity	32MB	64MB	128MB	128kB	
Instantaneous measurement	100,000 data	200,000 data	400,000 data	1,000 data	
Integration / demand measurement interval	1 sec.	7 hours	14 hours	28 hours	4 minutes
	1 min.	18 days	36 days	72 days	4 hours
	30 min.	1 year or more			5 days

In case that no file exist in the CF card.

## User-friendly "KEW POWER PLUS" is supplied

### Multiple connections by using commercially available USB hub

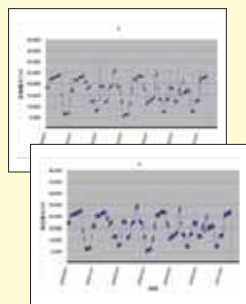
【Connection example】



**Simple setting for all functions by clicking.**

**Easy setting for date, month and year with calendar.**

The recorded data can be downloaded with the CSV file, and the data analysis processing including waveform can be done by EXCEL.



### System requirements

PC with CPU : Pentium II 200MHz or higher  
Operating system : Windows 98/Me/2000/XP  
Memory : 32MB or more  
Display : Resolution 800 x 600 dots, 65536 colors or more  
Hard-disk space required : 10MB or more

\*Windows® is a registered trademark of Microsoft in the United States.  
\*Pentium is a registered trademark of Intel in the United States.



## What "Demand Function" is

Demand function is widely used in Japan among different fields such as construction company, factory, building maintenance company, hospital, hotel, etc., who need to consume the large electrical power.

For example, 300kW, 500kW or 600kW on an annual basis. Therefore, they naturally need to monitor the total consumption of the power in order to save their power as low as possible.

Now, the demand function being provided in our Power Meter MODEL 6300 is quite useful and effective as simplified monitoring system.

## ●MODEL 6300 BASIC SPECIFICATION

Measurements and parameters	Voltage, Current, Active power, Apparent power, Reactive power, Active energy, Apparent energy, Reactive energy, Power factor (cos $\phi$ ), Neutral current, Frequency meter.
Wiring connections	1P 2W, 1P 3W, 3P 3W, 3P 4W
Voltage ranges <i>RMS</i>	150.0 / 300.0 / 600.0V AC
Voltage accuracy	$\pm 0.3\% \text{rdg} \pm 0.2\% \text{fs}$ (45~65Hz)
Current ranges <i>RMS</i>	50.00/100.0/200.0/500.0 A AC (with Clamp sensor MODEL 8125)
Current accuracy	$\pm 0.3\% \text{rdg} \pm 0.2\% \text{fs}$ + Clamp sensor accuracy (at 45~65Hz)
Crest factor	Voltage : up to 2.5 Current : up to 3.0 (with 90% fs or less)
Frequency meter range	40~70Hz
Frequency meter accuracy	$\pm 3 \text{dgt}$
Active Power accuracy	$\pm 0.5\% \text{rdg} \pm 0.2\% \text{fs}$ + Clamp sensor accuracy (at 45~65 Hz)
Accuracy precondition	PF=1, Sine wave, 23°C $\pm$ 5°C
Effect of power factor	Active power : $\pm 1.0\% \text{rdg} \cos \phi = \pm 0.5$ (PF=1)
Effective input range	10~110% of Rating range of V and A
Display range	1~120% of Rating range
Integration time for recording function	1/2/5/10/15/20/30 Seconds 1/2/5/10/15/20/30/60 Minutes
Display update period	1 second
Operating temperature and humidity ranges	0~+50°C, less than 85% RH (without condensation)
Storage temperature and humidity ranges	-20~+60°C, less than 85% RH (without condensation)
Over load protection	Voltage : 720V AC rms Current : 600A AC rms (with Clamp sensor MODEL 8125)
PC communication Interface	USB
PC card Interface	Compact flash card (Standard type 32/64/128 MB) not included
Safety standard	IEC61010-1 CAT. III 600V
Power supply	AC Line : 100~240V $\pm$ 10% (50/60Hz) DC Battery 9V : LR6 $\times$ 6(Battery life approx. 7h)
Power consumption	10VA (MAX)
Dimension	175(L) $\times$ 120(W) $\times$ 65(D) mm
Weight	Approx. 800g (including batteries)
Accessories	Test lead (4pcs), PC Software, USB Cable, Mains cord, Quick manual, Carrying bag, Batteries.
Optional accessories	Clamp sensor MODEL 8125 (3pcs). Wide range of clamp sensor up to 1000A on request. Compact flash card.

PC Output only

## ●CLAMP SENSOR (option) MODEL 8125



Ø40

500A

Measurement range	AC 0~500A
Output voltage	AC 0~500mV (1mV/A)
Accuracy	$\pm 0.5\% \text{rdg} \pm 0.1 \text{mV}$ (45~65Hz)
Phase shift	Less than $\pm 1^\circ$
Frequency responses	40Hz~1kHz
Output impedance	Approx. 2
Conductor size	Ø40mm max.
Safety standard	IEC 61010-2-032 CAT. III 600V Pollution degree 2
Operating temperature and humidity ranges	0~+50°C, less than 85% RH (without condensation)
Storage temperature and humidity ranges	-20~+60°C, less than 85% RH (without condensation)
Dimension	128(L) $\times$ 81 (W) $\times$ 36(D) mm
Weight	Approx. .260g
Cable length	Approx. 3m
Output connector	MINI DIN 6PIN
Accessories	Cable Marker Instruction manual

## MODEL 6300-01

- Consists of :
- MODEL 6300  $\times$  1
  - MODEL 8125  $\times$  3
  - Carrying bag  $\times$  1
  - Test leads set (Black, Green, Blue, Red)  $\times$  1
  - PC Software  $\times$  1    USB cable  $\times$  1    Mains cord  $\times$  1
  - Quick manual  $\times$  1    Batteries  $\times$  6



**! 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.

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