

PowerCube

kW Demand & kWh Meter



- **Giant Backlit Display**
- **Short depth DIN 96x96mm case Only 71mm**
- **kW, kWh, MD and Peak Demand**
- **High Accuracy, kW $\pm 0.2\%$, kWh Class 1**
- **Fully Isolated Current I/Ps (Meets LVD)**

PowerCube uses the latest LCD technology to provide power and energy readings on a giant display.

Power is displayed using 4.5 digits, 21mm high, while the 7 digit energy register is 12mm high.

Advanced technologies provide high contrast wide viewing angles with a long life backlight for clear viewing in all conditions. Custom design provides a display tailored for the application with legends (kW, kWh, MD, Peak etc.) giving clear unambiguous information.

Fully isolated current inputs ensure maximum safety and full compliance with the Low Voltage Directive, while the short depth of the case makes front panel installation simple.

PowerCube has been designed for a wide variety of modern loads - analogue measurement ensures accuracy even in the presence of distorted waveforms such as those generated by variable speed drives, computers, lighting dimmers, temperature controllers etc.

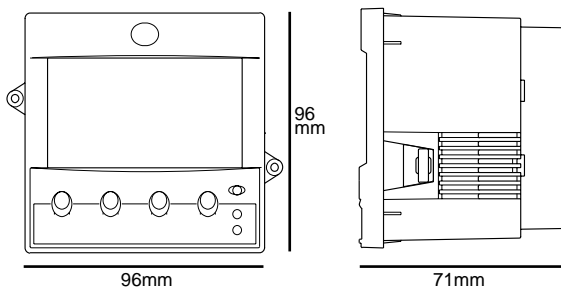
It may be programmed by the user to suit loads from a few watts to megawatts and to provide outputs suitable for a variety of applications such as Energy Management Systems, Data Logging etc.

Three display pages are available, each selected by an individual key : • kW plus kWh • Rolling Demand plus kWh • Peak Demand plus kWh •

The programming sequence is also simple:

- Set a CT and VT constant (1 to 200.000) •
- Set the Pulse Output Rate •
- Set the Demand Period (1 to 60 min) •

- ✓ GIANT BACKLIT DISPLAY
- ✓ LOW COST
- ✓ kW, kWh & ROLLING MD, INCLUDING PEAK
- ✓ DIN STANDARD 96 x 96 mm CASE
- ✓ FLUSH PANEL MOUNTING, SHORT DEPTH
- ✓ 0.2% ACCURACY ON kW
- ✓ CLASS 1 ACCURACY ON kWh
- ✓ FRONT PANEL PROGRAMMING
- ✓ SINGLE & 3 PHASE
- ✓ ISOLATED PULSE OUTPUT
- ✓ 25 YEAR MEMORY
- ✓ PROGRAMMABLE CT & VT RATIOS
- ✓ QUALITY RISING CAGE 4mm² TERMINALS



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SPECIFICATION

INPUTS

System	3Ø 3 or 4 wire Unbalanced Load 3Ø Balanced Load & 1Ø to order
Voltage	400/230V 3Ø LL/LN (110/63V optional) Others to order
Current	Fully Isolated 5Amp from CTs (1Amp optional)
Measurement Range	Voltage 50% to 120% Current 0.5% to 120%
Frequency Range	45Hz to 65Hz fundamental
Harmonic Range	Up to the 40th
Input Burdens	
Voltage & Current	Less than 0.1VA per phase
Overloads	
Voltage	x2 for 2 seconds
Current	x40 for 1 second

AUX. SUPPLY

Standard	230V 50/60Hz ±15%
Options	110V 50/60Hz ±15%. Others to order
Burden	5VA maximum

DISPLAY

Display Type	Custom LCD. Supertwist with continuous LCD Backlight
Data Retention	25 years minimum
Display format	2 lines of digits plus Legends
kW & Demand	4½ digits, 21mm high plus DPs
kWh	7 digits, 12mm high plus DPs
Legends	Various, 3 or 4mm high
Display Pages	3 pages plus configuration
	kW plus kWh
	kW Demand plus kWh
	Peak kW plus kWh
CT & VT Ratios	Fully Programmable
Legends & DP Pos.	Automatically set by VT & CT ratios
Demand Period	Selectable 1 to 60 minutes with 15 sub-periods

ACCURACY

kW & MD	<0.2% of full scale
kWh	Better than Class 1 per EN 61036 (IEC1036)

PULSE OUTPUT

Type	Volt Free pulse output, 1 pulse/unit of energy (depends on CT & VT ratio)
Max. Rating	Solid State Relay
Isolation	100V & 10mA, ac or dc max.
Programmability	2000V 50Hz 1minute from I/Ps Pulse Value & Duration

GENERAL

Temperature	Operating -10°C to +65°C Storage -25°C to +70°C
Humidity	Operating <75% non-condensing

STANDARDS

Safety	EN 61010-1 Installation CAT III
EMC	89/336/EMC EN 50081, Part 1 1992 EN 50082, Part 2 1995 EN 61036 & EN60688

MECHANICAL

Accuracy	
Dimensions	96x96x71mm per DIN 43700
Weight	300 gms
Enclosure	Black ABS with fire protection to UL95 VO self extinguishing
Terminals	Rising Cage type
Inputs	Max. 4mm ² (12AWG) cable