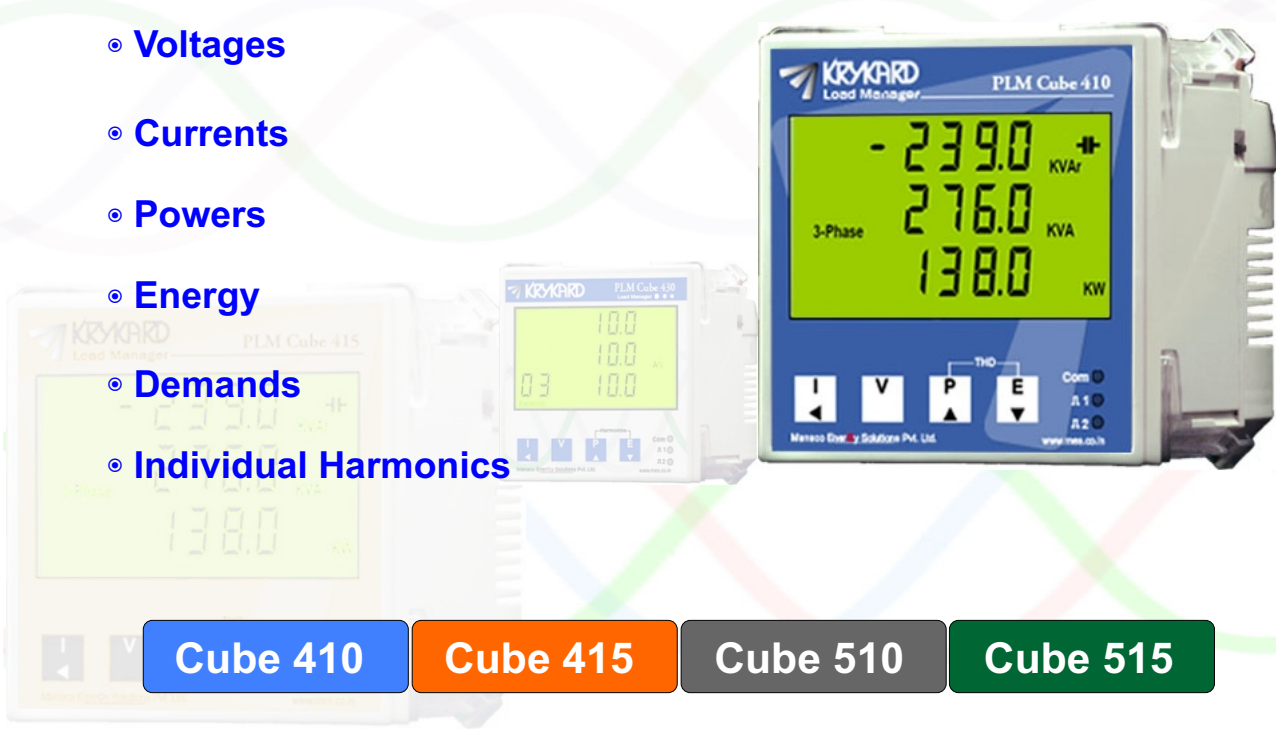


Load Managers that take Energy Management to a new level

Experience the power of 6 compelling advantages

- Voltages
- Currents
- Powers
- Energy
- Demands
- Individual Harmonics



Cube 410

Cube 415

Cube 510

Cube 515

PLM Cube 400 / 500 Series

Accurate for all field conditions

Works without errors even on new generation harmonic loads

1

- True RMS up to the 30th order harmonic
- PF range from 0 lag to UPF to 0 lead
- Measurement starts as low as 0.2 %FS (10mA)
- Accuracy: 0.1% on V and I; 0.25% on kW

Powerful Communication

Universal MODBUS RTU protocol - easy to commission & integrate

2

- Data communicated as integers with automatic scaling factors - for reliable transfers and simple interpretation
- User configurable custom data table for SCADA/DCS integrators - saves time & money

Comprehensive front panel

- Large 3-line backlit LCD display
- 4-key operation for easy navigation to any parameter
- Easy to understand symbols, '-' indications, parameter & unit display
- Diagnostic LEDs and password facilities for maintenance & security

3

Thoughtfully engineered to last long

- 2.5kV isolated CT inputs for safe operation
- Voltage overload - x2 for 1 hour
- Current overload - x40 for 0.5 sec
- IP 54 rating on front panel for use in any industry
- Temp range from -10°C to +65°C
- Gliding clips for tool-less and simple installation

4

Unmatched range of Load Managers

- PLM Cube 410 for feeders & generators
- PLM Cube 415 for feeders, generators, substation & incomer panels
- PLM Cube 510 for harmonic loads & feeders
- PLM Cube 515 for critical feeders, substations & incomer panels with high harmonic content
- Also available: PLM Cube 300 for load-end panels & PLM Cube 310 for dual energy applications

5

Features for the integrated world

- 2 digital inputs - for breaker status & pulse counts
- 2 digital outputs - for local alarms, demand control & remote control from PLCs
- 2 pulse outputs Wh and Varh - for 3rd party integration
- Ethernet port - for direct LAN & Web access
- Built-in memory - for on-board data logs & remote data monitoring

6

KYMARD®

Measurements	Cube 410	Cube 415	Cube 510	Cube 515
Voltages - lines & phases, Hz	●	●	●	●
Currents - phases	●	●	●	●
kW, kVA, kVAR, PF - ph & total	●	●	●	●
kWh, kVAh, kVARh	●	●	●	●
Peak V, I (phases)	●	●	●	●
Demands (kW, kVA, kVAR, I)		●		●
Peak Demands (kW, kVA, kVAR, I)		●		●
Neutral current	●	●	●	●
THD V and I	●	●	●	●
Harmonics upto 15th order (V & I)			●	●
Run- hours on setpoint	●	●	●	●
Export kWh, kVARh		Optional		Optional

Specifications	
INPUTS	
Voltage	400/230V - 3 Phase 3 or 4 Wire. PT prim programmable upto 400 kV. Measurement Range - 20% to 120%
Current	5A from external CTs. 1A optional. Fully isolated @2.5kV Measurement Range - 0.2% to 120%
Frequency Range	Fundamental 45 to 65Hz
PF Range	0 lag to 1.0 to 0 lead
Burden	Voltage & Current input <0.1VA per phase each
Overload	Voltage x 2 for 1 hr Current x 40 for 0.5 s max
DISPLAY	
Type	Custom, Supertwist, Backlit LCD
Format	11 x 6.6mm high digits with DPs & 3.2mm legends
Legends	Autoscaling depending on user settings
AUXILIARY SUPPLY	
Rating	Standard 230V 50/60 Hz +15% -20%; 1VA ; Optional 110Vac
Overload	x1.2 continuous
GENERAL	
Temperature	Operating -10°C to +65°C
Humidity	< 75% non-condensing
IP Rating	IP54 standard, IP65 optional
ACCURACY	
V & I	Class 0.1 IEC 60688
PF & Hz	PF - 0.2 deg; Hz - 0.05Hz
Power	kW & kVA - Better than Class 0.25 IEC 60688
Active Energy	kWh - Better than Class 1.0 as per EN62053-21 & BS8431
THD	THD on V & I - 0.5%
MODBUS COMMUNICATION	
Protocol	MODBUS® RTU with 16 bit CRC; 2-wire
Baud Rate	Baud rate 4800, 9600 or 19,200 user-settable
Data Tables	Customisable data tables along with regular data tables
Response Time	Reply within 250ms; New command within 5ms of previous one
MECHANICAL	
Terminals	Rising Cage. 4mm ² (12 AWG) cable max.
Case	Mablex adhering to UL94-V0. Self extinguishing
Dimensions	96 x 96 x 83.5 mm (72mm behind panel)
Weight	250 gms
PULSE OUTPUTS	
Output Type	kWh & kVAh; Normally open volt free contacts
Programmable	Pulse rate & length selectable
Contacts	100V ac/dc, 100mA, 5W max
Isolation	2.5kV for 1 minute
SAFETY	
Safety	Conforms to EN 61010-1 Installation Category III

The full range of the exciting Cube 400 Series



AIEnSoft Energy Management Software

Network upto 247 Krykard Load Managers in a single system

Powerful & Easy-to-use software for plant-wide monitoring, analysis & reports



Manaco EnerGy Solutions Pvt. Ltd.

conservation begins here

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Specifications subject to change without notice.