New Product Offerings

Energy Meters

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Energy Meters & Energy Analyzers

- **Energy meter- device to measure electrical energy consumption and other critical electrical parameters.**
- With energy becoming scarce and costlier, it is essential to accurately measure energy
- *'Accurate Measurement'* helps to identify and cure energy losses – leading to energy conservation
- **Digital meters help in measuring and monitoring critical parameters in real time, they are known for precision and reliability and hence** Helping industries to reduce TCO

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Our Current Product offering

- VIF Meter (CAM 100 & CAM100E)*
- KWh Meter (CAM 200, CAM200D & CAM200E)*
- Multi-function Energy Analyzer (CAM 300, CAM300D)*

* Detailed specs given in Marketing brochure

CAM100 - Digital VIF Meter

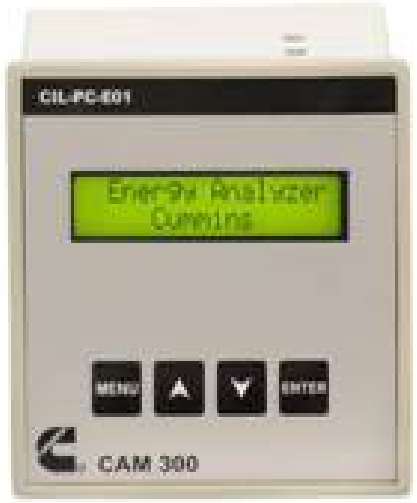
- CAM100E (Part No to be released)
  - Voltage, Current and Frequency
  - 3 line LED display
  - Accuracy is 0.5 %
- CAM 100(AX1006673)
  - All of above features + RS485 Modbus communication

CAM200 Digital KWH Meter

- CAM200E (AX1012785)
  - 6 Parameters – Voltage Current, Pf, Frequency, Kw & Kwh
  - 1 line LED display
  - Accuracy is 0.5 %
- CAM200 (AX1006674)
  - All the above + RS485 port for data transfer
- CAM200D (Part No to be released)
  - All the above + dual source measurement (Utility and Generator set)

CAM300 Energy Analyzer

- CAM 300 (AX1006659)
  - Measures 44 electrical parameters with harmonics
  - Alpha numeric 16 character 2 line LCD display
  - Accuracy is 0.5 %
  - RS485 port for data transfer
  - Direct reading CT with CT/PT ratio programmable
- CAM 300D (AX1012725)
  - All the above + dual source measurement (Utility and Generator set)



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Technical Specifications

- **1. System Inputs:**
- Supply Voltage: 230 VAC (±10% Line Regulation), 50 Hz
- 3 Phase voltage input (Y- connection) Max voltage 500 V
- Four membrane keys to set parameters
- **2. System Outputs:**
- 16 x 2 alphanumeric continuous backlit LCD display
- RS 485 MODBUS serial interface (19200-baud rate max)
- **3. Measurement Accuracy:**
- Voltage: ± 0.25% of Full Range
- Current: ±0.25% of Full Range
- Frequency: ± 0.2% of Full Range
- Instantaneous power: ± 0.5% of Full Range
- Power Factor: ± 0.5% (0.5<PF<1)
- Energy kWh: ± 0.5%
- **4. Operating Conditions:**
- Temperature: 0 ° C to 55 ° C
- Humidity: 0% to 95% non-condensing
- **5. Mechanical Specifications:**
- Size: 96x96x141mm
- Weight: 700 gms.
- Material: ABS Plastic.
- Mounting: Flush on Panel Mounting.
- Termination details: 10 MKDS (L Type detachable) Connectors on rear side.
- **6. Operating Modes:**
- RUN mode - user can see all parameters one by one using Increment and Decrement Key.
- Program Mode - communication parameter, CT/PT constants can be set. This mode is also used to reset the energy parameters and Maximum power

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Standards & Approvals

- NABL Approved
- Influence of supply voltage (IEC: 62052-11-2003 and 62053-22-2003)
- Influence of short time over-current (IEC: 62052-11-2003 and 62053-22-2003)
- Vibration Test (IEC: 62052-11-2003 and 62053-22-2003)
- Dry heat test (IEC: 62052-11-2003
- Cold test (IEC: 62052-11-2003)
- Damp Cyclic test (IEC: 62052-11-2003)
- Impulse Voltage test (IEC: 62052-11-2003 and 62053-22-2003)
- Protection against penetration of Dust IP 5X (IS: 14697-1999)
- Harmonic Distortion (IS: 14697-1999)

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Energy measured is energy saved

- Accurate, timely and periodic energy measurement gives following benefits:
  - Reduced Energy Costs
  - Better maintenance & lower down time
  - Improvement of efficiency & quality of energy
  - Optimization of production processes
  - Reduced emissions
  - Benchmarking against Industry/Global standards
  - Compliance with government regulations
- The Energy Conservation act 2001 (India), has following major provisions
  - Maintain energy consumption within specified norms
  - Maintain & report accurate energy consumption
- Use of Cummins meters will help to comply with these provisions and achieve the best results.