

EtherMetrics

DataCube® Energy Information System

product spec

Organizations are looking for innovative advanced submetering solutions to support long-term energy management, energy efficiency and sustainability initiatives. Through our technology innovations, EtherMetrics brings forth an under-developed and commercially scarce paradigm in energy monitoring and control that has its foundations in a long-overdue fusion of simplicity, scalability and flexibility.

This single-product solution, the DataCube®, encompasses all of the elements of a total energy information system - data acquisition, data storage, analysis, reporting, communication and control.

A summary of the value this product brings to the marketplace:

Simplicity - DataCube® comes ready to 'plug-and-play' with any pulse meter, fully integrated with all of the hardware, software and networking elements required.

Scalability - DataCube® is ideal for any size project and dramatically reduces the time and cost of implementation through simplified interfaces, automated commissioning and novel powering options, enabling rapid installation by non-trade labor, minimizing deployment lead-time and both initial and total cost.

Flexibility - DataCube® integrates elegantly with any facility control system, load or IT/IS system using industry standard communications and interfaces, allowing users to implement any variety of customized applications from cost allocation and billing to demand response, energy efficiency or CO₂ emissions reporting.

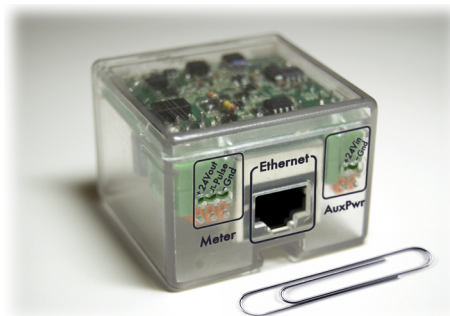
The DataCube® is designed to be a turn-key energy information solution, converting any meter into a smart meter. This allows the customer to access and manage all of their metered information, including historical and real-time consumption and demand data. The system can provide custom, formatted reporting on either a scheduled or on-demand basis while a rich control feature set allows users to limit load and avoid demand charges or participate in demand response programs. All of these features represent significant advancements in the level of information and control that commercial and industrial customers can employ.

About the DataCube®:

The DataCube® moves beyond monitoring and analysis to reporting, two-way communications and control. It provides you:

- Revenue-grade accuracy with revenue-grade meters
- kW and kWh for electric
- Consumption and rate data for water, gas, steam, etc.
- User-configurable sampling window for high accuracy kW readings
- Totalization
- 48V power output for powering devices/controlling loads
- Simple, fast installation, commissioning and BAS/SCADA integration
- Power-over-Ethernet (PoE), no batteries or local AC power required
- Local data storage on non-volatile memory (2GB, over 20 years)
- Integrated web server for meter data access using any web browser
- Console for centralized meter data management
- Integrated analysis, reporting and control features

The DataCube® is ideal for any advanced submetering application and provides the simplicity, scalability and flexibility required to meet the current and future energy information needs of your organization.



About the DataCube® platform:

- The DataCube® is field programmable. Customers have the ability to download software module updates and upgrades for new features and functionality via EtherMetrics.net.
- Power-over-Ethernet (PoE) simplifies powering and avoids batteries and any costly wiring of AC power, an expensive proposition particularly for large projects.
- IP networking problems from firewalls are avoided and only minimal interaction with IT departments is required. Devices support both static and DHCP addressing, saving time and money as IT systems change.
- No loss of data during power outages. 2GB of on-board data storage (>20 years of data)
- No additional software or hardware required.
- Analysis and reporting directly from device using any browser, or via centralized enterprise web application, EtherMetrics.net, hosted either by EtherMetrics or customer.
- Simple configuration and management either before or after installation.
- Configurable BAS/SCADA registers and controllable 48V power output enable physical and virtual facility integration and control strategies on any control system, enabling demand response, load limiting and other smart grid initiatives.

DataCube® Technical Specifications:

Input Voltage: Class 2 - 802.11af Power over Ethernet, 12-24V Aux

Input Power: <5W

Output Voltage/Current: 24V at 100mA Max

Pulse Channels: 1

LED Indicators: Red; Orange; Green; ETH link; ETH activity

Temperature: -20° C to +55° C

Dimensions/Weight: 1.5" L x 1.5" W x 1.0" H / 2 oz.

Mounting: Adhesive, Screw, Magnet Base, DIN Rail

Dimensions: 1.5" L x 1.5" W x 1.0" H

Communications: TCP/IP

Security: SSL

Protocols: SMTP, Modbus/TCP, BACNet/IP, HTTP, HTTPS, FTP, SFTP

Report Formats: CSV, XML

Logging Method: 1-minute pulse interval or per-pulse event

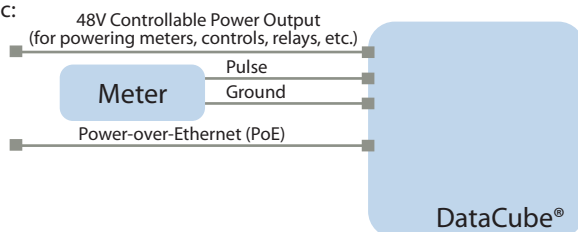
Memory: 2GB; >20 years

Scaling Factors: User defined

Software: None required

Agency Compliance: NRTL, FCC

Schematic:



To obtain more information or to purchase EtherMetrics metering products, please call EtherMetrics at 1-(888) 838-4736.

Product information is also available on our web site.

Please visit www.ethermetrics.com for more information.

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