Optergy Insights

Optergy Proton

Optergy Proton is a web-based building interface device that integrates building automation, energy management & facility management. The tools allow you to visualise, monitor, control and report on system operation in real time to ensure exceptional building performance and energy efficiency ensuring you reach your sustainability goals.

CORE BUILDING CONTROL FEATURES

BACNET IP AND MODBUS

BACnet IP and Modbus combined offer the best interoperable solution with minimal integration effort. Optergy Proton supports BACnet IP and Modbus RTU/TCP-IP with four onboard RS-485 communication ports used for Modbus devices.

COMBINED EMS/BMS REPORTING

Energy metering and reporting.

Optergy Proton's flexible reporting system contains pre-packaged reports with specified time periods. It allows the simple generation of custom reports, with multiple output options such as web, PDF and CSV. These can be automatically emailed at predetermined intervals.

PUBLIC DISPLAYS (Optergy P20 / P50 / P100)

Scrolling public displays are supported by a list of accessible URLs which are displayed in order for a predetermined time. Optergy Proton supports an unlimited number of public displays on a per-user basis allowing you to communicate with building users.

TRENDS, ALARMS, SCHEDULES AND CALENDARS

Users can create trends, alarms, schedules and calendars.Trend graphs can be modified to view multiple trends and view over a defined time interval. Users will be able to view a list of all alarms, with the ability to acknowledge and/or to clear. Multiple schedules can be linked to a calendar that overrides standard schedule entries.

EMAIL NOTIFICATION WITH ESCALATION AND ACKNOWLEDGMENT

Alarm notifications and saved reports can be automatically emailed at a pre-defined frequency to any user with email credentials. If alarms are not acknowledged, Optergy Proton escalates alarms to any number of predetermined recipients after a user defined time period has elapsed.

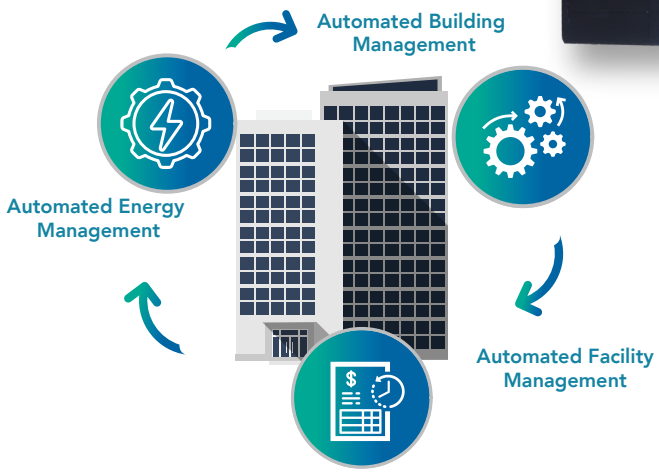
BUILT-IN WEB BASED TOOLS

Display tool to develop customised graphic interfaces.

All the necessary web based tools to customise, configure, and program are included with a built-in help file.

UNLIMITED USERS

Unlimited users with complete administrative configurations.



OPTIMISATION FEATURES

OPTIMUM START POINTS

Calculates the optimal plant start time to ensure the building achieves temperature when the occupied period begins.

DEMAND LIMITING

Reduce the amount of energy consumed by your devices during peak periods. This feature allows the user to create and arrange analog or binary load controls.

FACILITY MANAGEMENT FEATURES

MAINTENANCE TICKETS

Users can report problems to facility management. Optergy Proton administrators can post follow ups and keep track of progress.

TENANTS (Optergy Proton 50 / 100)

Tenants are building occupants who usually pay for their own utility needs. Tenants can have their profile entered into the system and attached to a space.

UTILITY BILLING (Optergy Proton 50 / 100)

Tenant spaces can be linked to utility meters with automatic billing. Invoices contain the energy and cost details as well as payment instructions.

AFTER HOURS BILLING (Optergy Proton 50 / 100)

Tenants may create after hours scheduling events that incur energy use charges. This feature can log events, create after hours usage invoices and automatically notify the tenants.

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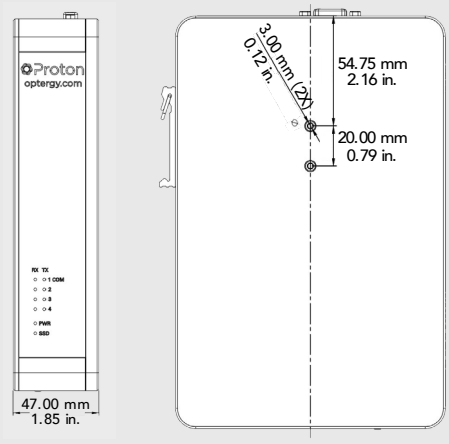
Product feature by model	Optergy Proton 10	Optergy Proton 20	Optergy Proton 50	Optergy Proton 100
Devices (BACnet/Modbus/Meters)	10	20	50	100
Optimum start points	10	20	50	100
Demand limiting points	10	20	50	100
Weather & Forecast	✓	✓	✓	✓
Public displays	✗	✓	✓	✓
Tenants	✗	✗	3	10
Utility billing	✗	✗	✓	✓
After hours billing	✗	✗	✓	✓

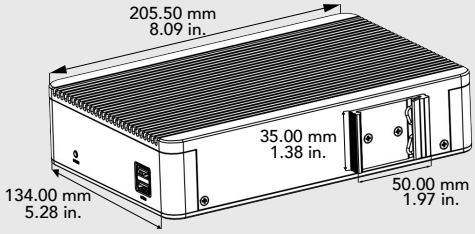
HARDWARE SPECIFICATIONS

Model	Optergy Proton (P10 / P20 / P50 / P100)
Processor	Integrated Intel J1900 2.00GHz Quad Core processor
Ethernet	1 (Active) x RTL8111F GbE port
Storage	120GB mSATA SSD
RAM	4GB
Connections and Indicators	PWR led (power) HDD led (drive activity) TX (Red) & RX (Green) led on each RS-485 Port 4 x 3 pin connector (RS-485) 1 (Active) x RJ-45 Ethernet Port 1 x 3 pin connector (12V DC)
RS-485 baud rates	9.6k, 19.2k, 38.4k, 76.8k, 115.2k
Power	12V DC input 3-pin connector
Operating Temp	-10°C ~ 60°C
Storage Temp	-20°C ~ 70°C
Relative Humidity	5%-95% (non-condensing)
OS	Debian LINUX OS ver Debian 10

Agency Certifications
- CE
- FCC

HARDWARE DIMENSIONS





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