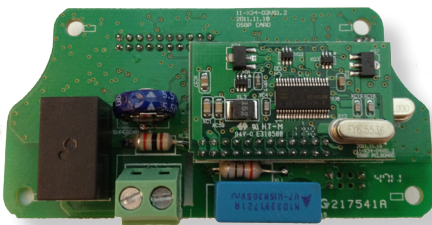


CPM 0600 OSGP Module

Reduces Development Time and Lowers Costs for Meter Manufacturers to “OSGP enable” Electricity Meters



CPM 0600 Key Features

- Interoperable sub-system within Echelon’s proven three-tier smart metering and grid system
- Complete OSGP implementation
- Supports remote firmware upgrades and reconfiguration
- Enables time-of-use metering
- 16 channel data logging and load profiling
- Comprehensive event, outage, and informational logging
- Enables maximum power based load limiting
- Optional time-based and on demand direct load control

Offer a Market-Leading Smart Grid System that Leverages Your Local Market Expertise

More than a communications chip, Echelon’s CPM 0600 Open Smart Grid Protocol (OSGP) Module is an integral part of Echelon’s proven three-tier Energy Control Networking Platform – an open standard, multiapplication platform for smart metering, smart grid devices and applications. The CPM 0600 allows meter manufacturers to quickly convert basic electricity meters into intelligent sensing and control points to offer their customers a complete market-proven smart grid system.

Eliminate Deployment Risks for You and Your Customers

The CPM 0600 is an integral sub-system within Echelon’s Energy Control Networking Platform where millions of smart meters and other smart grid devices deployed have proven daily communications reliability of 99.7 – 100% in some of the toughest environments worldwide. By choosing Echelon, you and your utility customers can have confidence that the systems you deploy will work reliably on day one and for years into the future.

Speed Your Time to Market and Lower Your Development Costs

With the CPM 0600 there is no need to reinvent scalable communications and control infrastructure or re-develop sophisticated IT systems at the enterprise. The CPM 0600, in combination with Echelon’s Energy Control Networking Platform, gives you a complete, proven solution as well as open interfaces that can plug into market leading software or apps at the enterprise level and communicate with intelligent grid edge devices in the field.

This allows you to focus your development effort and investment on creating value-added applications that are unique to regional market needs.

Expand Your Opportunity

Echelon's CPM 0600 OSGP Module fully implements both the ETSI TS 103 908 high-performance narrow band power line (PL) specification and the ETSI GS OSG 001 smart grid device application layer protocol, ensuring full interoperable with OSGP based systems from other vendors worldwide. Become part of an ecosystem where you can both leverage products from other partners to create richer solutions for your customers and take advantage of the opportunity to offer OSGP-compatible meters to utilities in other markets that are looking for multiple sources of interoperable meters and grid devices.

Specifications

Network Communication

CENELEC A-band-compliant power line communication with built-in coupling circuit complies with ETSI TS 103 908 Power Line Telecommunications (PLT) BPSK Narrow Band Power Line Channel for Smart Metering Applications. Application layer compatible with the ETSI GS OSG 001 Open Smart Grid Protocol.

Power Input

12V @ 70 mA typical, 350 mA while communicating (minimum = 10.8V, maximum = 14.2V). An additional 16mA is added when using the optional load control relay (and relay is active).

External 3V lithium battery is required (2.5V minimum, 3.6V maximum).

Interface Connector

20 pins (10x2), 2mm pitch, meant for soldering

4 pins (2x2) for mains voltage (Live - Neutral)

II/O interface (TTL-level only)

1 MEP serial interface to connect to the host device

1 optional single-pole voltage-free latching relay; maximum load rating is 250V, 5A; fully isolated. Enables locally-controlled, schedule-based and over the network, on-demand direct load control operations. Schedules can be remotely updated over the network

1 tamper switch input

1 set of signals for optical port interface

1 set of disconnect control signals. Disconnect control is also available programmatically through the MEP interface

1 input for Register Protect

1 output (pull-down resistor) to indicate that the CPM 0600 is connected to a host device

1 input for disconnect status. Status also available programmatically through the MEP communication interface.

1 input for hardware reset

Real-Time Clock

Real-time clock accurate per IEC 62052-21/62054-21 to +/- 0.5 seconds per day

Temperature

Specified operating range: -40° C to +85° C

Specified storage range: -40° C to +85° C

Humidity

95% RH non-condensing

Board Dimensions

82mm x 42mm x 23mm without plastic case

88mm x 47mm x 27mm with plastic case

All specifications subject to change without notice