



# MID Approved Power Metering

## Pay per Hour Power Monitoring Solution



EDP Europe's MID approved power metering system enables hosting companies to find a commercial edge over their competitors.

With power usage being one of the major costs of data centre hosting, having a system which can be implemented rack by rack that provides customers with Pay per Hour Power monitoring, and real-time billing of the actual electricity used makes it an ideal solution for multi-occupancy sites.

### Features & Benefits

- A 1U rack mounted metering unit for either single or dual supplies connects inline between the supply and any PDU.
- Each feed has a MID approved power meter that captures the usage data and is networked back to a central data collection point.
- A MID approved power meter can also be incorporated into EDP Europe's custom built PDUs.
- Dual point monitoring enables the captured data to be made available to both in-house DCIM systems and sent to a cloud based monitoring and reporting platform, which can be accessed via both hosts and their clients.
- The Pay per Hour Power cloud based software package provides access to real time measurements of kW hours, power factor efficiency and all important active and reactive power differential that shows how efficient your equipment is; clients can log in and see their hour by hour power usage and choose to monitor and manage their own consumption to minimise costs.
- Bills are produced for the precise amount of electricity consumed and are automatically generated by the software.
- Pay per Hour Power provides a clear advantage over competitors - precise energy billing, identification of power saving opportunities for clients and thus savings on overall running costs and maximum profits all round.
- Affordable solution - There's no up-front costs for the software, you simply pay a fee for data hosting, website access and maintenance based on the number of meters requiring monitoring.
- The software can be accessed from any PC, Tablet or Smart Phone with an internet connection, with apps available for iOS and Android devices.
- Ability to integrate other 3rd party networkable MID approved Energy meters.

## Hardware



### MID Approved Single Phase Multifunction Energy Meter

The Pay per Hour Power metering system utilises a feature rich, precision, MID approved energy meter built into a 1U inline metering module that works with legacy equipment such as PDUs, or is built directly into a client specific PDU solution. The energy meter measures a range of power usage and quality aspects, including kW hours, voltage, current, frequency and power factor. Up to 32 metering units can be linked together over a Modbus RS485 network, which can be extended through the use of the RS485 Booster module. The data is networked back to the central collection point, where it is converted to an Ethernet network for collection by an internal DCIM system or to a GSM module for automatic transmission to the Cloud based software package.



### RS485 Booster Module

The RS485 Booster Module enables the expansion of the MID approved power metering system. The inline booster module is installed after every 32 meters enabling the system to grow as requirements change.



### Ethernet Gateway

The Ethernet Gateway is a communication module that converts Modbus RS485 network to an Ethernet network and allows the collected data to be transmitted to internal DCIM systems.



### GSM Module

The GSM Module features a dual band 2G modem that changes the Modbus RS485 signal to GPRS and transmits the data to the Pay per Hour Power Cloud software.

## Software

### Pay per Hour Power Cloud Software

Pay per Hour Power is a Cloud based energy management software package that works with 3rd party MID approved energy meters. Users are able to access their account via PC, Tablet or Smart Phone that has an internet connection. Additional apps are available for iOS and Android devices.

The collected data enables clients to monitor their hour by hour power usage, identify power saving opportunities and choose to monitor and manage their own energy consumption to minimise costs.

Bills are produced for the precise amount of electricity consumed and are automatically generated by the software.

Billing templates can be easily tailored to suit the host's requirements with easy insertion of a header or footer. The billing platform also provides useful information including: Daily minimum / maximum consumption and a comparison between the current and previous billing periods. Multi-tariff rates can also be easily configured through the billing portal and information can be shared with almost any third party accounting software.

The software package is affordable as being Cloud based there are no up-front charges for the software. You simply pay a small annual fee for data hosting, website access and maintenance based on the number of meters you require to monitor.

