



WattmonMINI

Remote Monitoring & Control Platform



Network

- 10Mbit Ethernet
- Supports several USB cellular dongles in GPRS and 3G mode

Storage

- 8 GB MicroSD card included

Material

Cover	ABS (Light Gray)
Base	Nylon (Light Gray)

Dimensions & Weight

Length	112 mm
Width	40 mm
Height	90 mm
Weight	150 g

Applications

- Solar/Wind Energy Monitoring
- Grid-Tie inverter performance monitoring
- Cell Tower Monitoring
- Modbus RTU Monitoring

Features

WattmonMINI is a flexible data logging and control platform that runs a web server and uPHP, a PHP-compatible scripting language.

Easy to Use

- Configurable through a web browser
- Advanced automation without the need to program a single line of code

Communications

- RS-485 Modbus RTU Port for communication with multiple devices

Power

- AC Powered – 80-250V AC
- Low power consumption of < 2 Watts

Features & Benefits

- **Highly versatile**
Lets you customise it to your exact needs
- **Easy to use**
Allows non-programmers to configure and automate
- **Web based**
Accessible from your phone, tablet and pc.
- **Industry compliant**
Integrate new and existing devices easily using Modbus RTU
- **Local storage**
Securely store your data locally in CSV format, control who can see it
- **Programmable**
Write your own scripts in a built-in editor using a PHP compatible language



Introduction

WattmonMINI is designed for remote monitoring and can be accessed through a 3G or GPRS USB dongle or over Ethernet. The web interface is optimized for size and speed, and fully responsive, so it works well on both mobile devices and standard web browsers.

Wattmon can work as a fully stand-alone web server and store & present data directly from the device. This can prove problematic on some setups that do not have public IP addresses. Wattmon solves this problem by routing access through an optional proxy server when required, making it possible to access the device through multiple firewalls without issues. Wattmon can also be configured to push data to the mycloud.wattmon.com subscription-based portal, or as CSV data to a server of your choice.

The MINI has the same software as the PRO but only comes with a RS-485 interface and no additional digital IO. It is powered by a standard AC power cord and can work at between 80 and 240V AC.

Modbus RTU Support

Wattmon acts as a Modbus master and can interface with up to 8 Modbus RTU-compliant slave devices with a total maximum of 40 data points, such as current sensors, power meters, inverters and charge controller, which can all be daisy-chained. A simple device configuration tool lets you define and integrate a new device quickly. It can be configured for any baud rate up to 115200 with different parity settings as required.

It supports the following data types:

- IEEE754 floats (big and little endian)
- INT32 (big and little endian)
- UINT32 (big and little endian)
- INT16

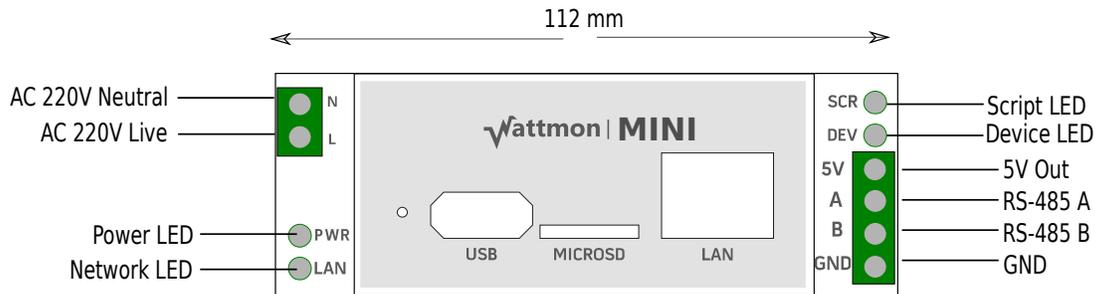
Customizable

Wattmon is highly flexible and can easily be customized for your needs. Although it is well suited for energy monitoring, it can do much

more. Unlike most Internet-enabled data loggers, Wattmon does not only upload data to a cloud but instead stores it locally on a MicroSD card, with up to three years of storage. The real power of the device lies in the automation and alerts based on inputs from the data being logged. For the hobbyist and home automation enthusiast, this product delivers a powerful combination of advanced features and user-friendliness and was designed to be usable by non-programmers.



Connection Diagram



Web Server

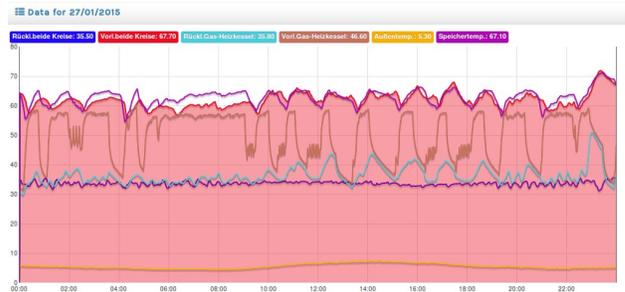
The inbuilt web server lets you view your sensor values graphically, as well as allows for downloading of relevant data via CSV. An intuitive interface makes it easy to configure your system with minimum hassle.

The entire web server runs off the Micro SD card and can be modified as per your requirements, including logo & UI adaptations.



Daily graph of solar charge and load in kWh

The web interface lets you view live data as well as historic data, and provides access to all the configuration options needed to set up and manage the device.



Example of daily graph for an automated heating system controller using Wattmon



Applications

Inverter Monitoring

Wattmon has drivers for the following inverters:

- Delta (RPI Series)
- Schneider (Conext TL,RL Series)
- PowerOne (RS-485 Series)
- Emerson (Liebert Series)
- Kaco (RS-485)

Datasheet Rev 1.0
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For more information visit our website:
<http://www.wattmon.com>

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Address:
Maitreye,
Auroville 605101
Tamil Nadu
India

AC Energy Monitoring

One or more AC Power meters with Modbus output can be connected and power can be remotely monitoring through the Internet.

Email: info@wattmon.com
Phone: (+91) 413 2622059

Remote Portal

Remote subscription-based portal can be used to view consolidated data from various sites in one place, thus providing installers with a powerful overview of their installations.



Grid Tie Inverter Overview

ID	Name	Zone	kWh Today	kW Now	Voltage	Frequency	Status	Options
0417-08-06100A1	Ashram Library	Pondicherry	119.67	20.18	236.40 / 237.50 / 236.70	49.93	Active	View
0417-08-03600A2	Ashram Dining Room	Pondicherry	121.74	21.589	229.30 / 232.90 / 226.30	49.97	Active	View
0417-08-04600A1	Ashram Delafon	Pondicherry	111.77	20.011	243.30 / 243.20 / 237.90	50	Active	View
0417-02-03200A1	Ashram School	Pondicherry	120.77	23.029	243.10 / 246.90 / 243.60	49.97	Active	View
CUTM Chairman	CUTM Chairman House	Odisha	17.73	10.783	232.80 / 227.70 / 230.10	50	Active	View
CUTM	CUTM Odisha	Odisha	8.88	6.251	215.80 / 205.90 / 241.60	50.01	Active	View