

# PV-monitoring: maximises the yield of solar panels



- ✓ Secure GPRS communication, separate from local internet connection
  - ✓ Electricity meter with MID certificate
    - ✓ Data monitoring at lowest cost
  - ✓ Easy to integrate using existing customer portals
    - ✓ Clear Sky Performance Index
    - ✓ Durable cloud software
    - ✓ Independent converter supplier
- ✓ Integration of smart meter data via independent service providers
  - ✓ Switch PV system on or off remotely

## Cost savings through efficient monitoring solution

**Want carefree monitoring and maximisation of the yield of solar panels on roofs of ground-level and high-rise homes? The Xemex PV monitoring solution works independently of residents' internet connections. Together with the integrated problem detection and optimisation algorithms (Clear Sky Performance Index), this generates significant cost savings.**

An electricity meter, fitted with a Xemex communication module and an application with integrated problem detection: these are the ingredients for an efficient and carefree monitoring solution. The cloud software by Cast4All analyses the data and makes it possible to communicate this via an application programming interface (API) with external software applications.

### Energy measuring

The energy meter is placed at the AC output of the converter and only measures the energy produced by the solar panels. The values of the power generated, as measured every 15 minutes, are saved to the Xemex communication module and read out via the GPRS communication by the server application. The meter is installed and activated in just ten minutes. The action of the module is – during both installation and use – easy to monitor thanks to LED indication.

### Secure GPRS communication

Communication runs via standard GPRS, but the module is suitable for future communication technologies, such as 4G, NB-IoT, LTE-M and LTE Cat 1. To keep the monthly data volume low, the log files are read out twice a day. A higher frequency is of course also possible.

### Integration with external information systems

The cloud software from Cast4All offers 24/7 insight into the measurement data. Or would you rather link the energy data to an existing CRM application, for example to connect the invoicing system to customer and measurement data or visualisation of the measurement data via your own portal? That is also possible, thanks to the Application Programming Interface (API).

### Basis for optimal yield

To optimise the yield of the solar panels, you naturally have to start by adequately monitoring yields. The communication module contains an application with integrated problem detection and optimisation algorithms. The Clear Sky Performance Index is a unique, accurate and fast method for detecting performance losses. It identifies any performance losses fast by analysing trends.

### Alarm filtering

In the event of a decline in the yield and zero production that is not caused by weather conditions, the monitoring solution sounds the alarm directly. Thanks to intelligent alarm filtering, false alarms (e.g. due to snow on the panels) are a thing of the past.

#### Find out more?

For further information, contact +32 32 01 95 95. Or go to

[www.xemex.eu](http://www.xemex.eu)

or [www.cast4all.com](http://www.cast4all.com).

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