

FREQUENTLY ASKED QUESTIONS

Do I need to lay cables?

No. The Amperix has been designed as an add-on solution and is easy to install – you just need WLAN access in the area of your power cabinet (own house) or sub-panel (flat). Control signals of the HexaBus home automation system are transmitted to your devices through radio signals (6LoWPAN, 868 MHz).

Can I use ethernet network connection instead of WLAN?

Yes. Cable length usually doesn't matter in private households.

How can I access my power consumption and PV production data?

You can access your power consumption and PV production data via the website, and the mobile website. External partners have started development of smartphone applications. We also offer the data through an API, i. e. you can develop your own presentations.

Which data are transmitted?

Each minute, your power consumption is transmitted to the mySmartGrid website. Different visualizations are generated there, e. g. an hourly and daily overview. However, the data are stored in that high resolution merely for an hour. When a metered value is older than an hour, it is pooled with five other values at a time to generate a daily overview. That way, we "forget" older values. In order to protect data privacy, this is desired.

But I want to download the data in full resolution!

This can be done through our API. We already have a collection of C++ tools for creating personal archives. However, they are currently intended for the advanced user. A service that allows recording and downloading the data in the highest possible resolution is currently under construction.

Who can access my data?

We will use the recorded data only for creating representations, support purposes and further improvements of the platform. All the data will be used for research only in anonymized form.

Which encryption is used?

SSL, more precisely TLS, which is equivalent to banking applications etc.

Do I need an Amperix for each of my devices?

No, the Amperix records the consumption of your complete household with all devices. Only a small HexaBus Plug is needed to control devices in a later project phase.

Do I need a permanent internet connection?

Yes. The devices receive information from the internet and send power consumption values continuously. Therefore, you need a permanent internet connection, e.g. over a flat-rate. Since the amount of transmitted data is very small, you don't need a very large flat-rate, though.

I want to develop an application for android mobile phones, Desktop-PCs or other.

Please talk to us. We decide from case to case how we can support external developers. For example, we offer development kits. This is subject to the single condition that the emerging code circulates back into the Community.

I am owner of a PV power plant. Which benefits does the platform offer?

Owners of PV power plants are encouraged to use PVSpy which extends the mySmartGrid platform by a yield prediction for the coming days and an independent PV monitoring.

Does the Amperix have integrated data storage for buffering data on connection problems or the like?

The Amperix buffers the metering values in its RAM and transmits all available data when the connection is re-established. Time stamps etc. are conserved in the process, i. e. the metering values are assigned to the correct time points. Depending on the number of attached sensors and the installed software version, 2–3 days without internet connection can be buffered that way.

Does the Amperix support static IP addresses or DHCP?

Both are possible. An installation wizard supports the installation technician to choose the adequate connection method (WLAN vs. LAN, static vs. dynamic IP) and

to enter the appropriate configuration data (IP etc. or WLAN key). If there is no WLAN radio reception at the installation spot, we recommend a WLAN range extender or powerline adaptors.

Is it possible to access the Amperix from remote?

Users can unlock the maintenance access on the website. Subsequently, the Amperix builds up a secure tunnel to a maintenance server, through which a technician gains access to the Amperix. That way, remote access to the Amperix is becomes possible without modifying the user's firewall. Besides accessing the configuration interface, it is possible to log into the Amperix directly via SSH. It is not possible to access the Amperix without the user's consent.

How is data security ensured?

Of course, the usual security measures like firewalls, import of software updates etc. are put into practice. Additionally, we only store data that are absolutely necessary: On the webserver, we keep no personal details of our users. Metering values are linked to aliases that users choose themselves.

What is the mean time to respond in case of malfunction?

For our customer systems, the mean time to respond in case of malfunction or failure is the next working day. Since the Amperix are buffering the metered values in the meantime, there is no major data loss to be expected. We assume that the 1st level Support is provided by an energy cooperative or PV installer as is the rule in IT systems, i.e. we are not the direct contact for end customers. To ensure fast problem solution, we would provide replacement devices preliminary at no charge.

How can performance be guaranteed with increasing number of users?

The complete application architecture (from Amperix through data interface to the web interface) has inherently been designed under security and performance aspects. Full support for several thousand users per server is unproblematic.

In which ways can the web interface be adapted? (e.g. links, advertisements, news ticker etc.)

The web site consists of an extensible set of modules, i.e. optional plugins and contents can be added easily. The mobile website can serve as a showcase for that: it basically represents just another theme on the basis of the normal website. The navigation has been adapted to small screens by making use of icons and the layout has been optimized.

Which certifications do the devices have? CE, TÜV...

The Amperix has a CE-Certification and fulfills all German regulatory requirements.

Become part of the mySmartGrid community! Register at:

www.mysmartgrid.de



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