



## STANDARDS COMPLIANT OPEN-SOURCE HOUSE BUS SYSTEM

- Easy integration into inverters, heat pumps and other devices
- Intelligent actors for complex control scenarios
- Licence-free open-source hardware platform
- Based on the internet standard IPv6
- Easy end-user installation
- Data encryption for secure communication

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[www.hexabus.de](http://www.hexabus.de)



**1** HexaBus components are already designed to be easily integrated into heat pumps and in-verters.

**2** HexaBus gives you quick facts about your home: Will my PV yield enough to switch on yet another device?

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### Home automation supplements photovoltaics

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Electricity rates rise every year, continuously. At the same time, photovoltaic feed-in tariffs are on the decrease inexorably. As a result, using solar energy on the spot becomes even more interesting – the significance of home automation increases. Controlling devices to consume power when it is generated is also economically sensible.

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### HexaBus: An internet-based open-source house bus system

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With the HexaBus the Fraunhofer ITWM provides an open-source house bus system which allows the implementation of arbitrary control scenarios. And yet the system is based on internet standards and can be used licence free.

Through an integrated description language even complex control programs can be implemented. Those programs are always transferred to single end devices, i.e. a switchable plug – the system works without a central control. Devices are not affected by failures of other devices. An integrated visualization gives you quick facts about your home: How much power am I consuming at the moment? Will my PV yield enough to switch on yet another device?

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### Easy Installation and good coverage

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The installation of the devices can be carried out by the end user – the use of IPv6 ensures a trouble-free setup. At the same time, the data encryption with AES-128 provides a high security. All devices can serve as a repeater as needed and boost the range. Additionally data can also be transported via cable links and existing IPv6-enabled networks.

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### Flexible building blocks are designed to be integrated into inverters and other devices

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For system integrators, we offer consulting, and technology development. HexaBus has been designed for easy integration into inverters, heat pumps, etc. Temperature sensors, push buttons and a lot of other devices can be integrated, too.

Along with the energy management systems mySmartGrid and myPowerGrid, a powerful energy management solution kit is placed at your disposal.