

What is AWIS Wireless PowerControl?



AWIS PowerControl modules are an easy and low-cost method of bidirectional, quasi real-time processing of counter readings and switching commands.

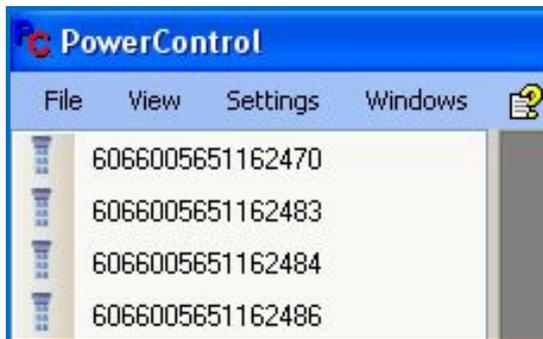
The aim was to develop a remote inquiry system based on a self-configuring network equipped with a PC-USB adapter communicating with the power columns via radio contact. Even in critical transmitting and receiving ranges, data transfer shall be safe.

A feature which has not yet been used on camping sites or at marinas is the self-configuration and the automatic "self-healing" radio network.

AWIS PowerControl is based on the WPAN standard 802.15.4 and has been developed with particular regard to easiest handling. Large networks consisting of up to 1000 power columns can be implemented without any problems.

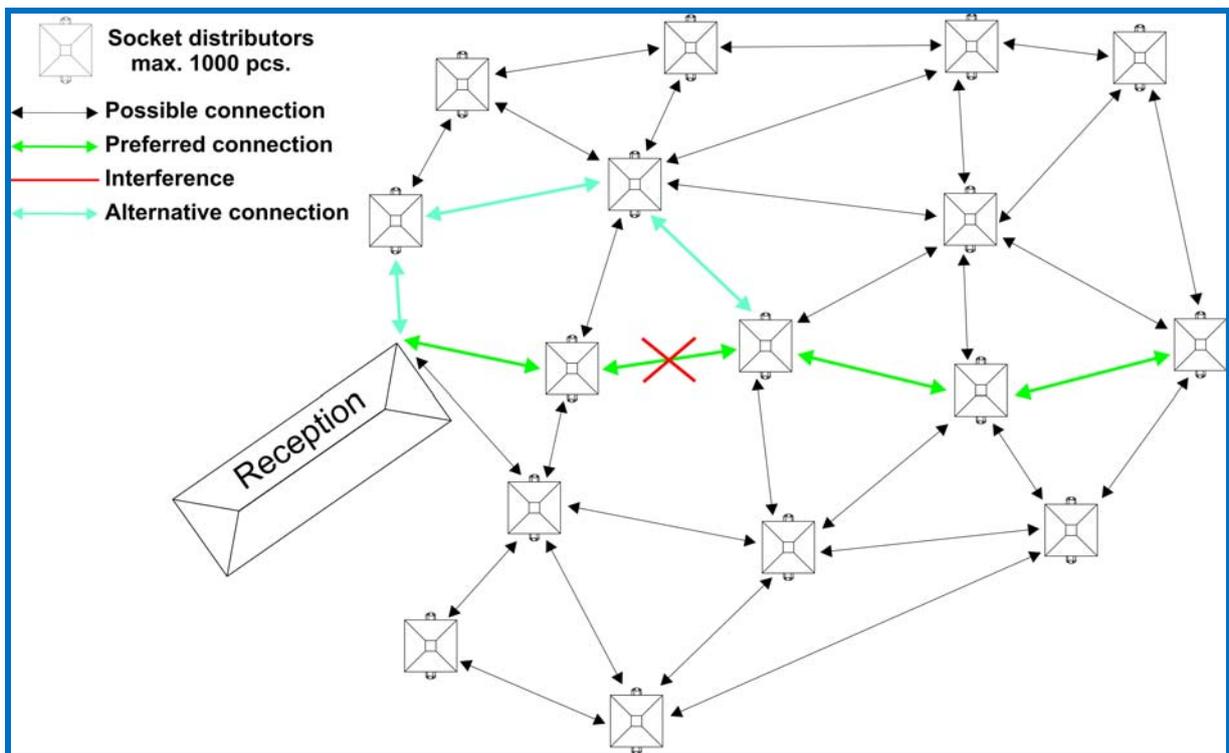
For that purpose, AWIS PowerControl uses the so-called continuous frequency hopping, in order to eliminate interferences caused by other radio systems or devices, such as microwaves. When communicating, the system does not always use the same radio channel, but communicates via up to 16 radio channels in case of bad communication or if communication does not work.

The PC-USB adapter configures, controls and monitors the whole network. There is a bidirectional radio communication between itself and the power columns.



After starting the system, all power columns connected to the network send their identifier to the PC-USB adapter. At regular intervals, the power columns independently and autonomously search for new participants, in order to integrate them into the network and to send the new identifier to the PC-USB adapter.

Each PowerControl module is, among others, also a router which is able to find new radio channels via other modules logged into the network in case of interferences due to changing radio shadowing caused by mobile homes or cars. This means that very large ranges can be reached without any problems.



During development work, particular importance has been attached to a high standard of operational safety. The module detects a malfunction in the radio network and switches on all sockets during this malfunction. This ensures a constant power supply of the places even in case of possible radio interference. Furthermore, it will be possible to switch on all sockets via a potential-free contact, e.g. by means of a key-operated switch, in case of a malfunction of the electronic module.

All counter readings are permanently saved, even in case of a power failure in the PowerControl module. If the PC is switched off, the radio network remains switched on in the background. This procedure ensures that the counter readings in the software are automatically updated when the PC is started, without the network having to be constituted anew.

Which advantages does PowerControl offer?

- Exact registration of power consumption via calibrated electronic counters
- Manual reading at the pitch can be dropped – time saving for your staff
- No electricity theft due to disconnection of sockets by the central station
- Up-to-date counter data on the screen at any time
- Individual management of pitches
- Prices currency-neutral in Cost or kWh changeable at any time
- Easiest operation without any special knowledge

Die übersichtliche und bedienerfreundliche Oberfläche ist in der Handhabung genial einfach und ohne Einarbeitungszeit zu bedienen.

