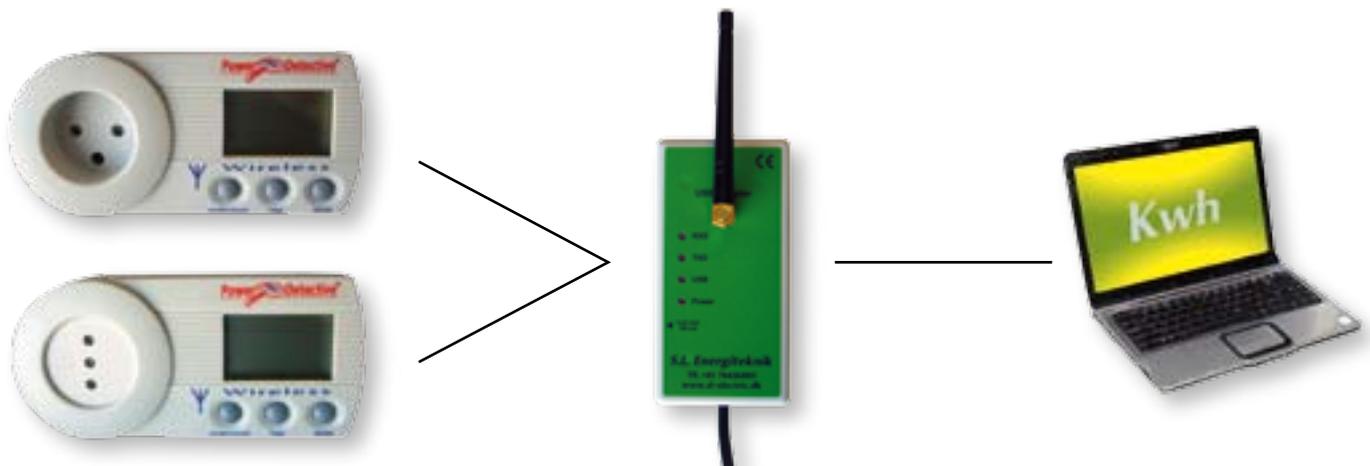*Description of the*

PowerDetective
radio device

Wordwide international plugs and sockets

The PowerDetective is a top-quality measurement device which can be used to determine the electricity costs of individual electrical devices in the home and in industry.

The PowerDetective also transmits the current effective performance in watts, the energy consumption in kilowatt hours, the present current and voltage and the present cos Phi per radio during the operating time irrespective of its settings. The PC-USB adapter creates the interface with the PC.

The measurement cycle can be set between 1 second and 60 minutes.

It is also possible to start and stop the measurement process manually. The price per kilowatt can be indicated to 3 decimal places.

The energy consumption, measurement time, maximum performance, current, voltage, present output and cost readings can be obtained during and after the measurement procedure.

The internal measured data storage prevents data from being lost when the PC is switched off or the radio connection interrupted.

Up to 40,000 performance values can be stored with time stamps in the standard version. The data is maintained even when the system is idle.

Technical details

Measurement range
0 - 3600 watts

Resolving power
0.1 watts

Precision
in excess of 2% from reading value

Current measurement range
0 -16 A

Resolving power
0.001 A

Precision
in excess of 2% from reading value

Voltage measurement range
85 - 250 V 45 - 65 Hz (working range)

Precision
in excess of 1% from reading value

Resolving power
1 V

Installation consumption
< 0.3 watts

Working range
85 - 250 V 45 - 65 Hz (working range)

Transmission frequency
2.4 GHz ISM band

Range
approx. 300 m with unrestricted view between 2 participants.
No range limitation thanks to network creation.
(Protocol based on IEEE 802.15.4- standard)

Identification
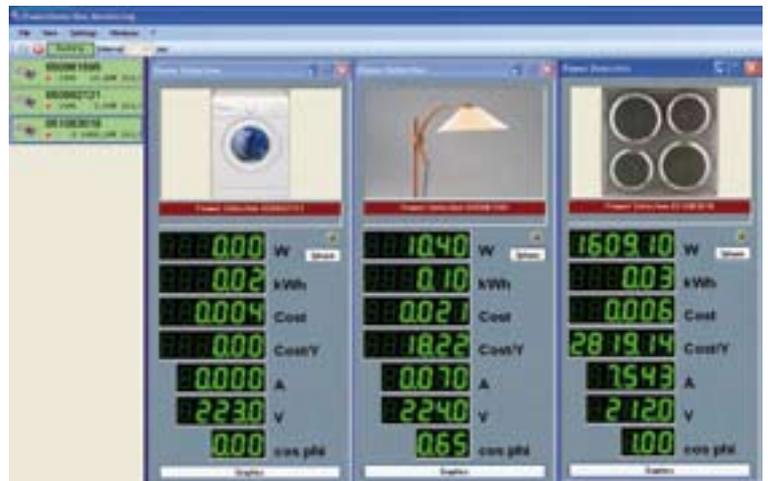Automatic address allocation

Internal database
40,000 measurement value with time stamp.

Displayed values:
- Performance (W)
- Maximum performance (W)
- Energy consumption in kilowatt hours (kWh)
- Current (A)
- Voltage (V)
- Energy costs during the measurement period (cost)
- Annual energy costs (cost)

The following measurement values are displayed in the easy-to-use PC software:
- Effective performance in watts (W)
- Energy consumption in kilowatt hours (kWh)
- Energy costs during the measurement period (cost)
- Annual energy costs (cost)
- Current (A)
- Voltage (V)
- cos phi

There is no limit to the number of PowerDetectives which may be logged on to the radio network.

All the parameters, such as electricity price, measurement interval, start/stop, etc. are configured in the PC and stored in the PowerDetective.