## **PowerGraph-v4**

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PowerGraph gives you the tools to optimise the costs of electricity in accordance with Rationel Energy Use.

The system monitors automatically and continously the general power consumption (kW), switches on or off certain electricity users during short periodes, and allows you to manage your energieflow easily and clearly structured.

**PowerGraph** has 8 measuring and 4 calculated inputs that count outputpulses from electricity, gas and water counters. All measuring inputs can be individually chosen to be digital(puls) or analogue (0..10v or 4..20mA)

There is an input for synchronisation with the electricity counter.

There are 8 extra inputs for 'batch registration' : the system logs all measuring inputs from start till end during activation of the batch-input. This is usefull when relating energy measurements to different products on the same production line.

Finally there is another input (hard- or software) that determines an expensive periode during the day.

Communication is possible by ethernet (16 users at the time) and communicates with our energymeter **pSens** by network, without IP-adres. CAN-bus allows to develop future requirements.

**PowerGraph** even calculates a 'now'-value. It is based on the time between the last 5 input pulses, which gives an indication of the power at this moment, and not integrated over 15 minutes. It has a similar result as current transformers.

**PowerGraph** functions completely stand-alone, saves 15-minutes values internally during 50 years(!), is delivered with the user-friendly and universal software package **WinWatt** for Windows 2000, XP, 7 en 8, that can manage several systems.

With **PowerGraph** and **WinWatt** you have very performant tools at your disposal. These tools allow you to manage your installation to the best, with lots of clear information and overviews.

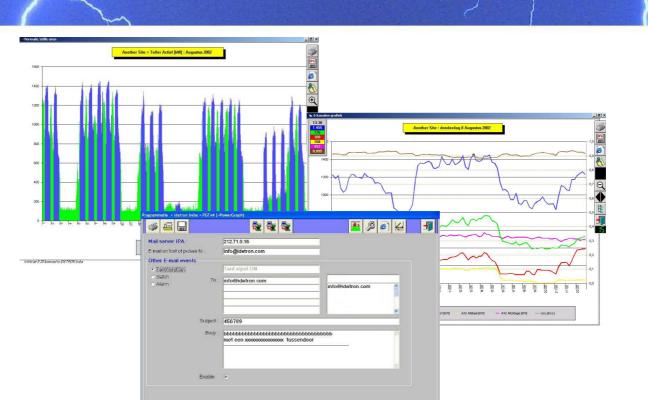




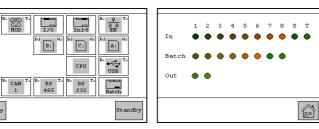
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WinWatt

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System	PowerGraph V3	PowerGraph V4
Number of measuring inputs, optical isolated	8 digital	8 digital/010V/420mA
Batch inputs	no	8
3 Tarifs : normal, silent and special. Choise of special hours by	Hardware/software	Hardware/software
External synchronisation	Every 1-3-5-10-15-30-60"	Every 1-3-5-10-15-30-60" Even by internet
Color display with touchscreen	no	70x55mm
Power Supply	9-33VDC or 11-25VAC	9-33VDC or 11-25VAC
Interval length	1-3-5-10-15-30-60"	1-3-5-10-15-30-60"
Memory	85 days	100 year (4GB)
Communication	RS232/485	RS232/485
Ethernet	10MB	2 x 100MB
CAN-bus	no	yes
Directly with pSens	no	yes
Digital outputs as option in WinWatt (hardware ready)	2 times 8 relais	16 relais via CANbus modules
Analogue outputs as option in WinWatt (hardware ready)	1 time 2 (420 mA)	no

LEDs