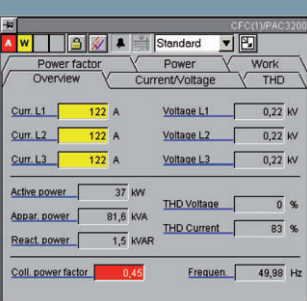


# Systematic Power Management

## Power management for SCADA applications



With energy resources becoming scarcer and more expensive to procure, there is acknowledged necessity for intelligent power management. Against this challenging background, our power management system for WinCC ensures long-term efficient energy utilization thanks to optimum monitoring and control.

### Three integration solutions for improved flexibility

- Basic power monitoring through integration of SENTRON PAC power monitoring devices via their GSD files; data display configuration via standard WinCC tools
- Fast and comprehensive integration of SENTRON PAC power monitoring devices via block libraries for SIMATIC WinCC – without power management functions
  - Components:
    - SIMATIC S7 function blocks
    - Preconfigured faceplates (e.g. comprehensive display and monitoring options of SENTRON PAC measured values)

■ Complete, integrated power management solution via the SIMATIC WinCC powerrate software add-on. Highlights:

- Power/energy detection (e.g. electricity, gas, water) and visualization via adjusted objects (e.g. faceplates or graphics templates)
- Load profile display
- Load management: Power limit monitoring according to process- and user-specific parameters
- Time synchronization
- Configurable reports and export of consumption data (for cost centers, batches, duration curves)
- Batch-related consumption detection
- Measured value display and monitoring of SENTRON PAC power monitoring devices
- Status representation and remote switching of breakers
- Web access to power management functions via WinCC Web Navigator

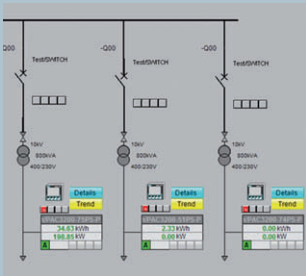
# Power Management

Answers for industry.

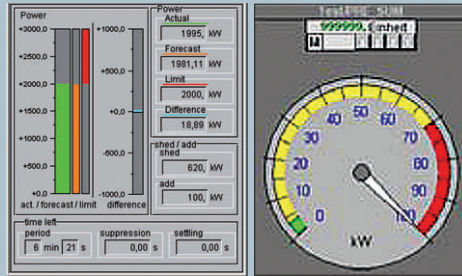
**SIEMENS**

# SIMATIC WinCC powerrate

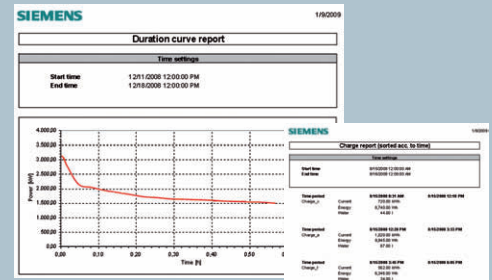
## Comprehensive functions for efficient energy utilization



Transparency of the power distribution



Predefined faceplates, e.g. load management



Power consumption evaluation in reports (graphical and tabular)

SIMATIC WinCC powerrate standardizes, visualizes and archives average energy and power demand values and provides them with a time stamp for a user defined period. The connection of SENTRON PAC power monitoring devices via DPV1 communication facilitates the monitoring of selected measured values, e.g. active power and active energy, currents and voltages. The integration of breakers via digital inputs and outputs allows for breaker status indication and remote switching via the faceplate. In addition, load curves visualized via WinCC support a fast and precise overview of consumption values.

### Convenient evaluation

Excel-based reports can be generated manually or in a time-controlled manner and for example indicate the allocation of power consumption and costs to individual cost centers or production batches.

This way, consumption and costs can be compared, analyzed and energy-saving potentials can be identified.

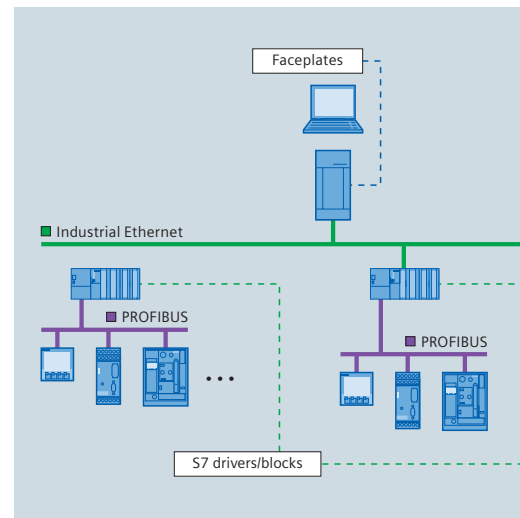
### Safe monitoring

The integrated load management supports consumer efforts to meet average power demand value per period which are agreed with the power supply company. Up to 100 loads can be monitored with the settings in the priorities list. Specific parameters, e.g. min./max. ON and OFF times, can be adjusted in the HMI system's faceplates.

### Elaborate system architecture

The software collects the system's consumption data via field buses. SIMATIC S7 compresses the data (average values) and saves them in the memory for case of communication failures.

The data is visualized within WinCC in a clearly structured manner and saved in the WinCC archives.



### Order numbers

SIMATIC WinCC powerrate V 3.0, TRIAL license	3ZS2795-1CC30-0YG7
SIMATIC WinCC powerrate V 3.0, engineering + 1 AS runtime license	3ZS2795-1CC30-0YG0
SIMATIC WinCC powerrate V 3.0, 1 AS runtime license	3ZS2795-1CC30-6YH0
SIMATIC WinCC powerrate V 3.0, unlimited runtime license	3ZS2795-1CC30-6YD0
Library SENTRON PAC3200 for SIMATIC WinCC, engineering + runtime license	3ZS2791-1CC10-0YG0
Library SENTRON PAC3200 for SIMATIC WinCC, runtime license	3ZS2791-1CC10-6YH0

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