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MAXIMUM RELIABILITY IN OPERATION

# SICAM PPC Compact – Photovoltaic Plant Control

Ensures safe and reliable control of photovoltaic systems

**SIEMENS**

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# Easy to set, Easy to configure, Fast to commission

## Benefits at a glance

- Rapid deployment through pre-built, tested and integration-ready solution
- Maximum yield through fast control, tracking of key performance indicators and early warnings
- Future proof grid code compliance through fine-grained, customizable, and future adaptable control scheme settings
- "State of the art" protection against hacker attacks to highest security standards

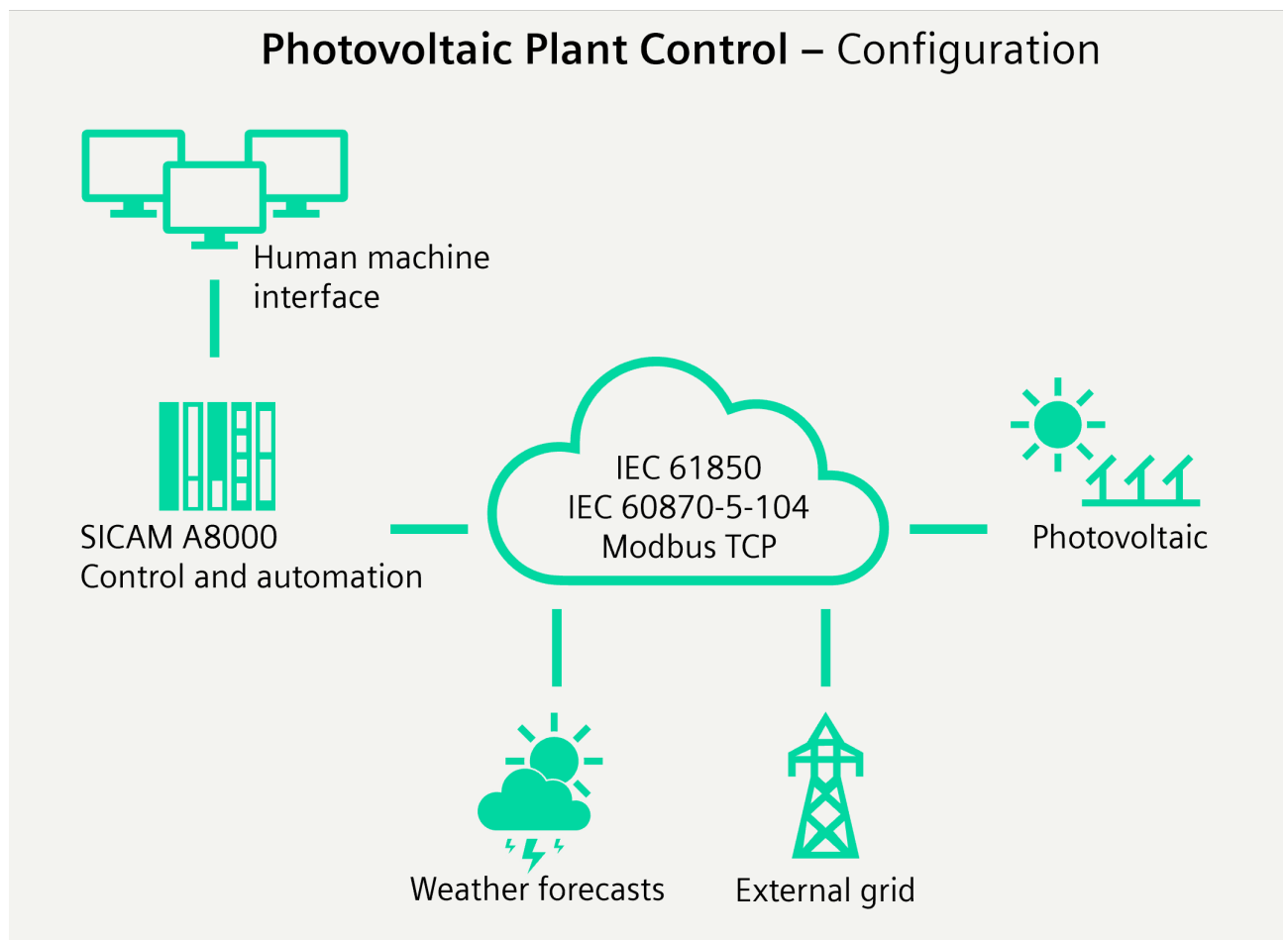


Figure 1: Overview Photovoltaic Plant Control – Configuration

# A compact plant control solution you can rely on

## Active power control

- Max. active power (MPPT Control)
- Active power limitation (P Limit)
- Active power control w/o PID and feedback loop

## Reactive power control

- Reactive Power Control inactive
- Reactive Power Control (Q Control)
- Voltage Control
- Q(V) Control (Voltage droop control)
  - Q(V) point based curve
  - Q(P) Control
- Power Factor Control (Cos Phi or Tan Phi)
- Reactive Power Priority (Q Priority)

## Frequency response control

- Maximum power capability reduction with falling frequency
- Frequency sensitive mode for over- and under frequency (FSM O/U)
- Limited Frequency Sensitive mode for over- and under frequency (LFSM O/U)
- Power adjustment in case of frequency deviation P(f)

## Plant size

- Maximum inverters or sub controllers/dataloggers
  - 22 for A8000 CP-8031
  - 66 for A8000 CP-8050
- Maximum 50 MWp

## Fault Ride Trough

## Visualization – Web UI

Integrated Web Server for visualization of

- Plant overview with inverter output view
- Real time plant data
- Alarms and events

## Hardware options

- Robust controller – SICAM A8000 CP-8031 or SICAM A8000 CP-8050
- Various IO-Cards (optional)
- Redundant controller (2 separate controllers with separate power supply)

## Communication

Standard communication protocols like

- Modbus TCP
- IEC 60870-5-104
- IEC 60870-5-101(optional)
- IEC 61850 (optional)

## Security

- End-to-end security through IPSec
- SICAM A8000 complies with latest cybersecurity standards (NERC CIP, ISO/IEC 27001, IEC 62443, IEC 62351)



Figure 2: Ground-mounted photovoltaic plant

# A solution to fit your needs

SICAM PPC Compact – for controlling your photovoltaic systems

## Seamless integration or smart integration

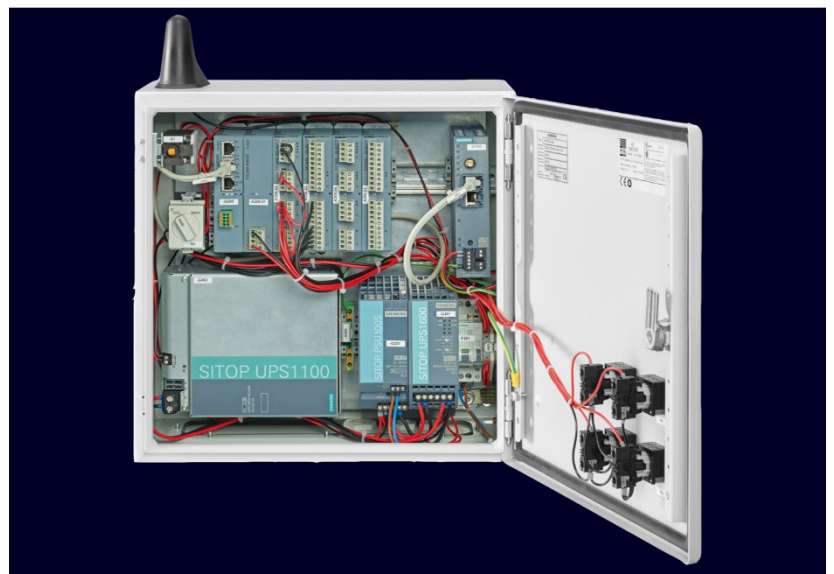
Intelligent power management in a compact format. Intuitive configuration with our SICAM Device Manager Tool. Seamless integration through pre-engineered, pre-tested and ready to integrate systems delivery. Secure communication between all levels i.e. local control system and remote operation center. Efficient performance of maintenance work thanks to clear presentation of information.

## Software-hardware combinations

Choose from one of two software-hardware combinations:

1. Benefit from our cost-effective preconfigured control cabinets. They are small and their robust design makes them suitable for even the toughest environmental conditions.
2. Gain more flexibility with an individualized configuration of our standardized hardware and software options.

Figure 4:  
The photovoltaic control cabinet uses the compact, flexible, and powerful SICAM A8000 control and automation system.



Gain the reliability you need and the security you can count on.  
Discover SICAM Photovoltaic Plant Control Compact.

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