



OPM-Box GridProtect

Omexom Power Management: telecontrol and protection technology combined in one cabinet – space-saving, pre-assembled and grid-compliant

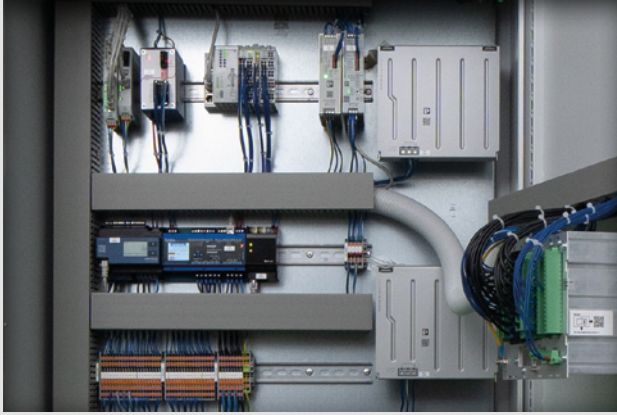
Save time during project engineering and reduce risks in the commissioning of your PV plant – with or without battery storage. Together, we develop a complete concept in line with the technical requirements. You receive a fully pre-assembled cabinet system with all required components. You handle the on-site installation – we guide you through the certification process safely all the way to the commissioning of your plant.

Grid-compliant plant connection

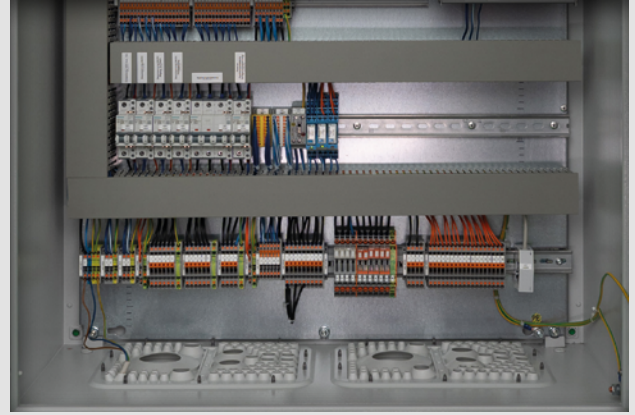
- Telecontrol technology fully integrated – optionally with power plant controller and direct marketing integration
- Standard-compliant protection technology with higher-level decoupling protection (üEKS) in accordance with VDE requirements
- Pre-assembled, tested, ready to connect. Saves time during engineering and avoids sources of error during on-site wiring
- High quality and safety standards in accordance with DIN ISO 9001 and DIN ISO 27001 as well as CE-compliant implementation

The OPM-Box GridProtect is delivered fully wired, tested and documented – including protection device, telecontrol unit, communication hardware and customer-specific transfer terminal block.





Pre-wired protection device on terminal block



Customer-specific transfer terminal block

Benefits

- ✓ Telecontrol controller including LTE router and M2M SIM card for all networks
- ✓ Support for all necessary communication protocols (IEC 60870, Modbus TCP/RTU ...)
- ✓ Customer-specific transfer terminal block
- ✓ Test terminal block for easy commissioning and testing
- ✓ Pre-wired telecontrol and protection systems – ready for immediate deployment
- ✓ Higher- level decoupling protection in accordance with VDE-AR-N 4110
- ✓ Designed for seamless integration into existing plants and retrofit projects
- ✓ Supports integration of third-party protection devices

Our Service Commitment

- Dedicated project contacts from planning through to commissioning of the entire plant
- Plant testing, certification, communication with the grid operator: achieve your goals faster with us
- We support your project as a reliable partner – on request also through changes and challenges until your plant is **successfully connected to the grid**

Service Modules

- Certification documents
- Grid connection point measurements
- Generating plant measurements
- Handling of direct marketing/trading
- Communication links (fibre optic, DSL, network)
- Engineering (hybrid plants, multi trading, remote plants ...)
- Plant protection

Base Modules

OPM Module	Description
OPM-Box Base	Cabinet incl. OPM controller & LTE
Telecontrol	Telecontrol connection to grid operator
GridProtect	Protection system (e.g. üEKS)
PowerControl	Power control per VDE-AR-N 4110
UPS	Extension with battery backup

Expansion Modules

OPM Module	Description
Direct Marketing	Direct Marketing Integration
InverterGateway (Solar-Log™)	Integration and control of inverters via data logger
GeneratorConnect	Integration of other power plants, e.g. CHP
BatteryConnect	Integration of battery storage systems
P _{AV,E} -Limit	Feed- in limitation per P _{AV,E} -regulation
ChargeConnect	Integration of charging infrastructure
Cockpit	Local dashboard for plant analysis
Custom	Device integration and control according to individual requirements

With our combined protection cabinet solution every plant expansion can be implemented reliably:

- No additional cabinets needed
- Space-saving integration into existing stations
- Clean and standard-compliant implementation without major modifications
- Minimal downtime
- Pre- integrated and factory-tested

Omexom Smart Technologies GmbH
Horlemannplatz 1, 47589 Uedem

+49 2825 89-321
smart-energy@omexom.com

omexom.de/smart-energy

