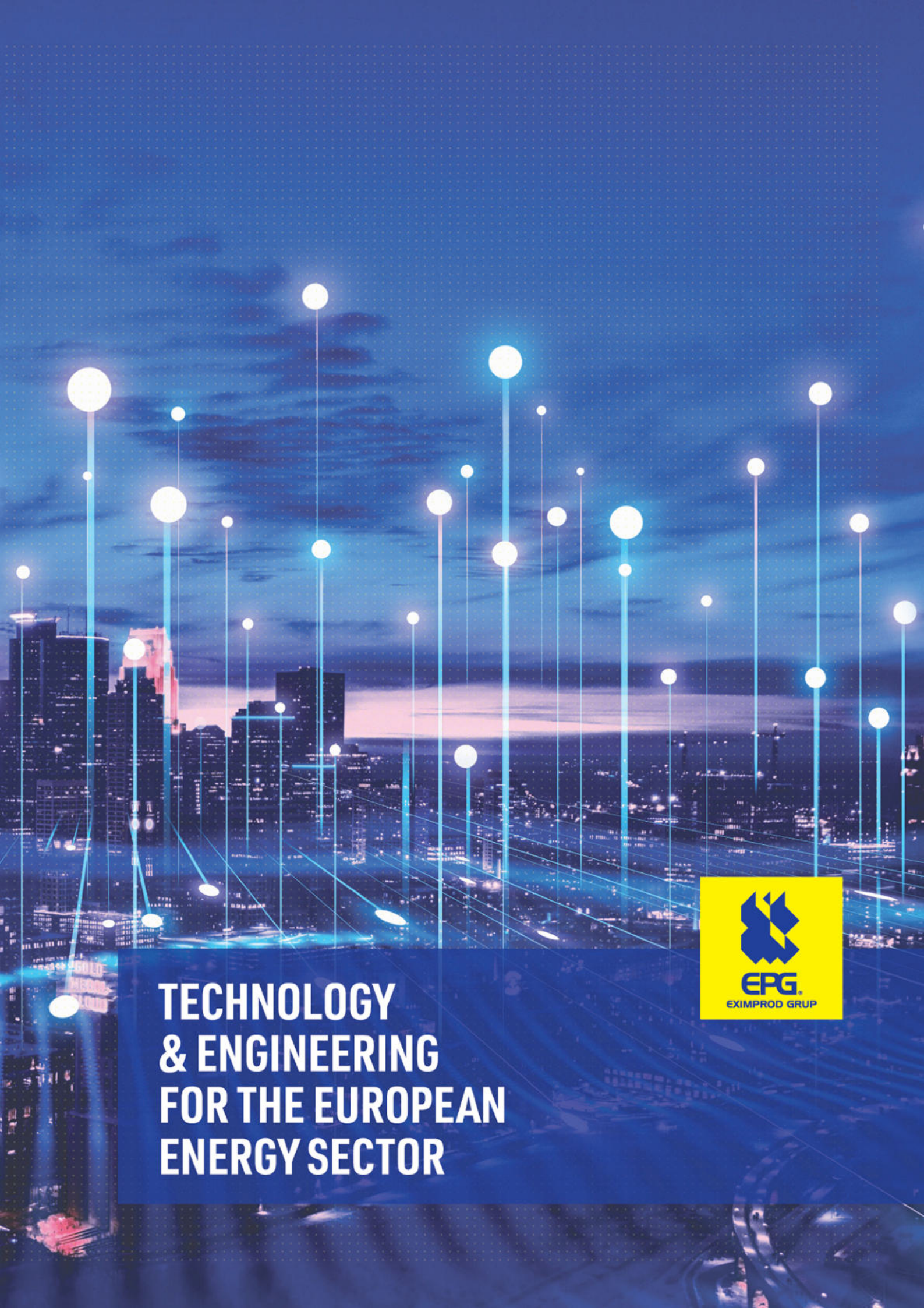


TECHNOLOGY & ENGINEERING FOR THE EUROPEAN ENERGY SECTOR

EPG
EXIMPROD GRUP



EXIMPROD GRUP

Eximprod is a group of companies that offers a comprehensive portfolio of equipment, solutions and services for the energy sector.

Innovation

Recognized for its innovative spirit, Eximprod constantly invests in manufacturing, automation and R&D capabilities for new solutions and products.

Innovation is the main component of our business DNA that shapes our achievements, partnerships and vision of the future.

Professional solutions

Eximprod Engineering develops and implements professional solutions for energy infrastructure: electrical design and consulting, automation and smart grids, IT / OT solutions, software development, operation and maintenance, project management and development of renewable energy power plants.

We aim to be our customers' trusted advisers, allowing them to offer better services.



THE DIGITAL FUTURE OF ENERGY

Imagine a completely digital grid that supports all use cases and enhances stability, reliability and security.

The challenge

The utility grids are transitioning with the deployment of distributed assets into highly digitized and bi-directional networks. The growing DER integration demand calls for improved grid operations, better forecasting and efficient investments in infrastructure.

Our approach

To help the industry transition faster, more efficient and securely, Eximprod has developed a set of edge computing software solutions on Cisco IOx to enable secure monitoring and control capabilities for the distribution grids and integrate with utility ADMS / SCADA, power system applications and analytics applications.

EDGE COMPUTING SOLUTIONS

Our edge computing portfolio turns the data already present in the grid into operational intelligence, so operators can run their networks more reliably, cost-efficiently, flexibly and safely.

Built on secure, standards-based communication and automation, the same software operates power grids, oil and gas assets, manufacturing units and smart city infrastructure. It integrates any new or existing third-party equipment – protection relays, power quality devices, IEDs – and connects it to SCADA/DMS dispatch.

Delivered as a container, it runs on any edge device, from an industrial router to a standard PC.



Business needs

- Operational Technology (OT) environment visibility & control
- Increase efficiency of maintenance operations
- Integrate Distributed Energy Resources (DER)

Benefits

- Quick deployment on several edge platforms
- Interoperability with legacy systems
- Low latency processing of local data
- State-of-the-art security features
- Simplified management

Solutions Portfolio

ES200 - VIRTUAL RTU
PPC200 - POWER PLANT CONTROL
SIRIUS - SMART GRID SOLUTIONS
EMS200 - ENERGY MANAGEMENT

Use Cases

- Distribution automation
- LV PV prosumer control
- Complex DER site management
- MV line voltage regulator control
- Automated disturbance record collection

Key Features

- **Cybersecurity based on Cisco:**
  Enterprise-grade encryption, firewall, VPN, app signature verification
- **Runs on multiple hardware platforms:**
  All Cisco IOx-enabled industrial routers / switches / compute nodes
- **Legacy Devices Support:**
  Integrate multiple devices over several protocols (I/O, serial & Ethernet)

Communication protocols

IEC 61850	IEC 60870-5-104
DNP 3	IEC 60870-5-101
Modbus	MQTT
IEC 61850 ed.2	REST API



ES200

VIRTUAL RTU

cisco Compatible

EPG EXIMPROD GRUP

ES200 is a virtual Remote Terminal Unit (vRTU): a software platform that acts as a multi-protocol communication controller for industrial devices, especially in the energy industry. It runs as a container on the edge device, enables data extraction, concentration, processing and storage, and acts as a secure SCADA gateway for substations, supply points and connection points.

CERTIFIED BY DNV·GL



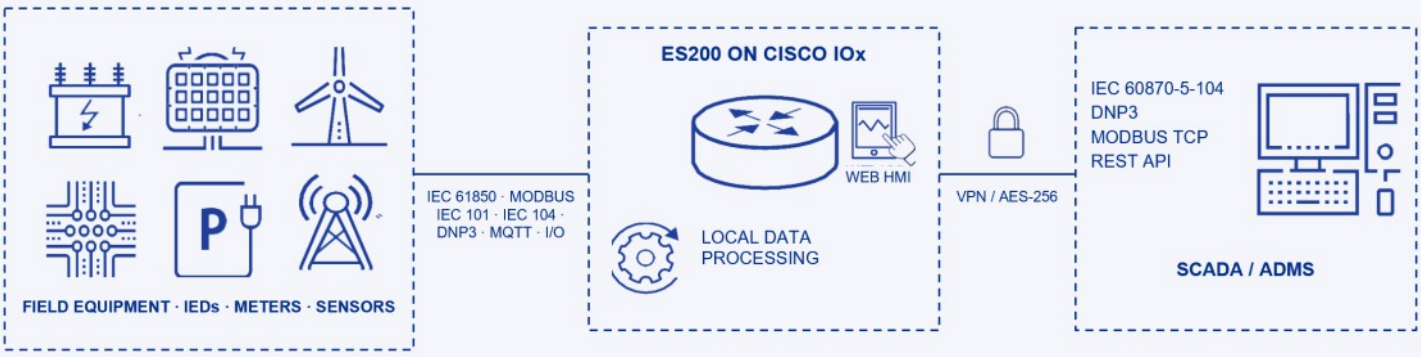
Business needs

- Connect industrial devices installed in remote locations
- Integrate Distributed Energy Resources (DER)
- Operational Technologies environment visibility & control

Benefits

- Centralized management & control of field devices
- Advanced cyber security deployed in OT
- Upgradeable and multipurpose system
- Event history of up to 500,000 time-tagged events (1 ms)

PROCESS OVERVIEW



PPC200

LOCAL PROSUMER CONTROL

cisco Compatible

CERTIFIED BY DNV·GL



PPC200 is the Power Plant Controller of the ES200 platform. It enables automatic control of the power generated by connected DER sites based on the energy metrics established by the DSO/TSO, ensuring stepwise regulation of the power delivered by a producer according to grid-stability criteria. PID control loops handle active and reactive power setpoints and respond rapidly to frequency and voltage deviations, with ramped transitions.

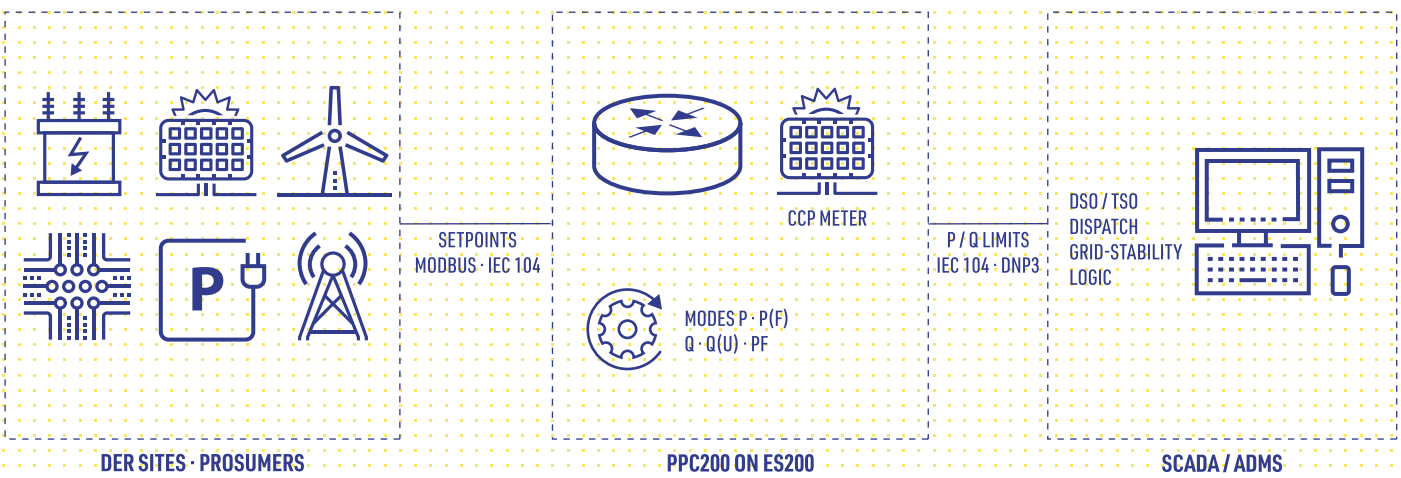
Business needs

- Protect and maintain the stability of the power network
- Monitor and control power flow at the connection point
- Improve DER penetration rate

Benefits

- Operating modes P, P(f), Q, Q(U) and power-factor control
- Validated setpoints, ramped output and inverter-delay handling
- Joint voltage regulation across several plants at one coupling point
- Increase the hosting capacity of the existing grid

PROCESS OVERVIEW





cisco Compatible

SIRIUS

SMART GRID SOLUTIONS

EPG EXIMPROD GRUP

SIRIUS is the software platform built around the Virtual Power Plant at its core, integrates intelligent power systems at the edge of the network. It aggregates producers, consumers and flexible loads into one virtual power entity, enables load shedding and demand response across the smart grid and retrieves real-time data from smart meters at the coupling point and on each plant component.

CERTIFIED BY DNV·GL



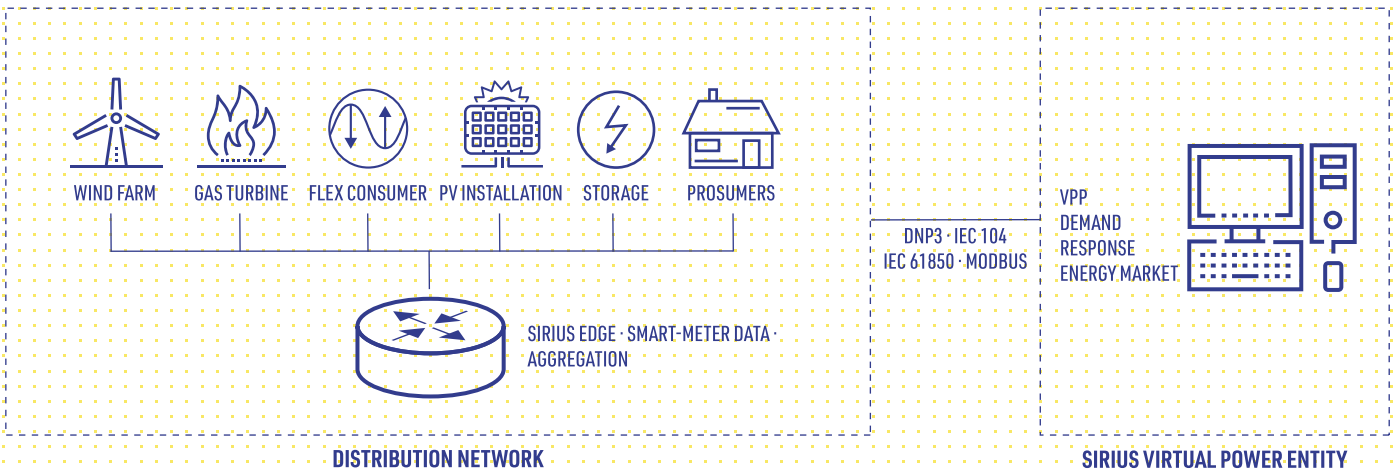
Business needs

- Integrate production & consumption resources
- Centrally manage and control power plants
- Aggregate generation to connect to the energy market

Benefits

- Integrations of smart meters in billing & SCADA platforms
- Optimized energy management
- Improved response behavior
- Grid-compliant aggregation of prosumers

PROCESS OVERVIEW





Cisco Compatible

EMS200

PLANT CONTROL & ENERGY MANAGEMENT

EPG EXIMPROD GRUP

EMS200 is the power plant controller and energy management system of the ES200 platform. It operates PV, wind and BESS installations as one grid code compliant power plant: P, Q, voltage and frequency control at the coupling point, ramped setpoints, BESS state-of-charge management and data exchange with the DSO/TSO dispatch. Designed to meet the general requirements of the ENTSO-E network code (NC RfG). Built on ES200 and SIRIUS.

CERTIFIED BY DNV·GL



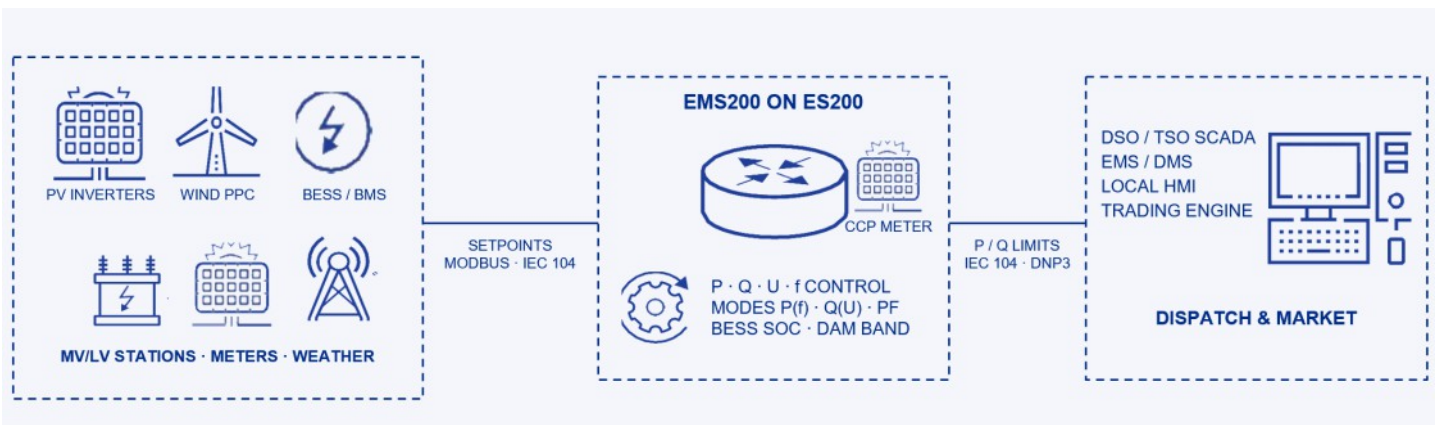
Business needs

- Protect and maintain the stability of the power network
- Monitor and control power flow at the connection point
- Operate PV, wind and storage as one plant, in compliance with the grid code
- Keep the day-ahead band and qualify for ancillary services (FCR, aFRR, RR)

Benefits

- P, P(f), Q, Q(U) and power-factor control modes at the coupling point
- Validated setpoints, ramped output, BESS dispatch with SOC management
- Higher hosting capacity through joint voltage regulation of several plants
- Three integration scenarios: via dataloggers, direct to inverters, or hybrid
- Performance testing and compliance reports delivered with the system

PROCESS OVERVIEW





cisco Compatible

EPG EXIMPROD GRUP

USECASE · ES200

DISTRIBUTION AUTOMATION

Remote control and local automation of MV/LV substations and overhead lines

The challenge

DSOs need to see and control thousands of secondary substations, supply points and line switches that were never connected to SCADA, while keeping SAIDI and SAIFI down and dispatch workload under control.

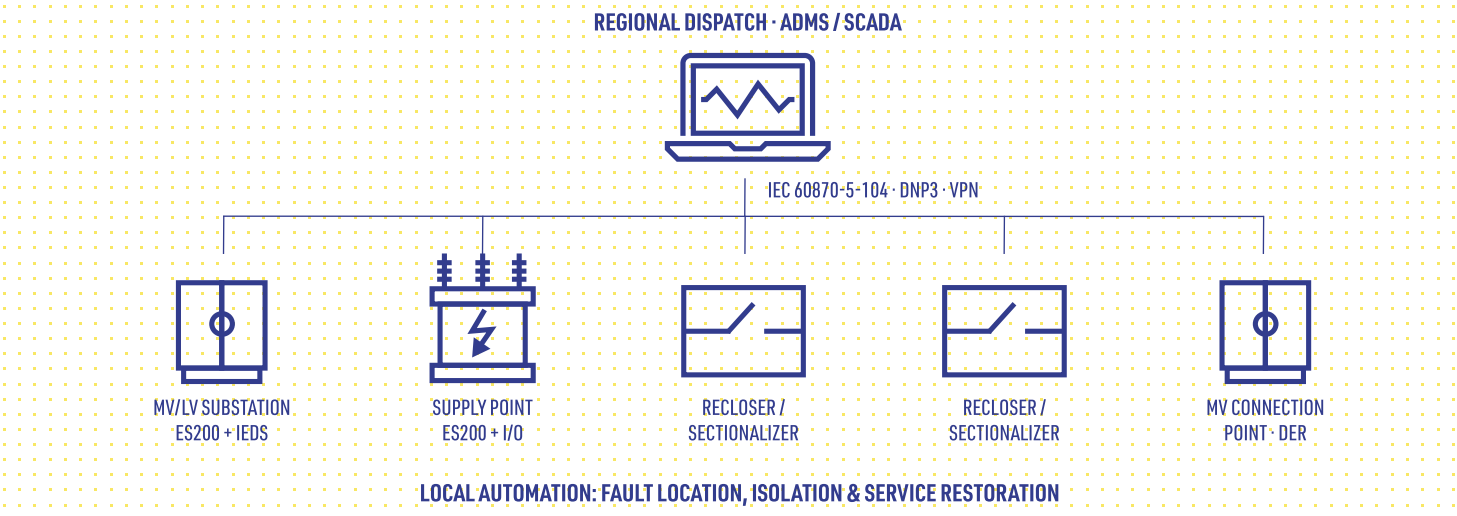
The solution

ES200 runs on the Cisco industrial router already installed for communications and turns it into the RTU of the substation. It integrates protection relays, meters and I/O over IEC 61850, Modbus, DNP3 or IEC 60870-5-101, exposes the site to the ADMS/SCADA over IEC 60870-5-104 or DNP3 and executes local automation logic.

What you get

- One device for communications, security and automation
- Advanced Distribution Automation (ADA) with FLISR sequences
- Reduced number of customers interrupted and faster restoration
- Fleet deployment and updates with EOM200 Edge Orchestration Manager

HOW IT WORKS





Compatible

USECASE · PPC200

LOW VOLTAGE PHOTOVOLTAIC REMOTE CURTAILMENT

Stepwise control of low-voltage photovoltaic prosumers from the secondary substation

EPG EXIMPROD GRUP

The challenge

Rooftop PV connected to the low-voltage network raises voltage and reverses power flow at the secondary substation. The DSO needs a way to limit injection when the grid requires it, without replacing the inverters already installed.

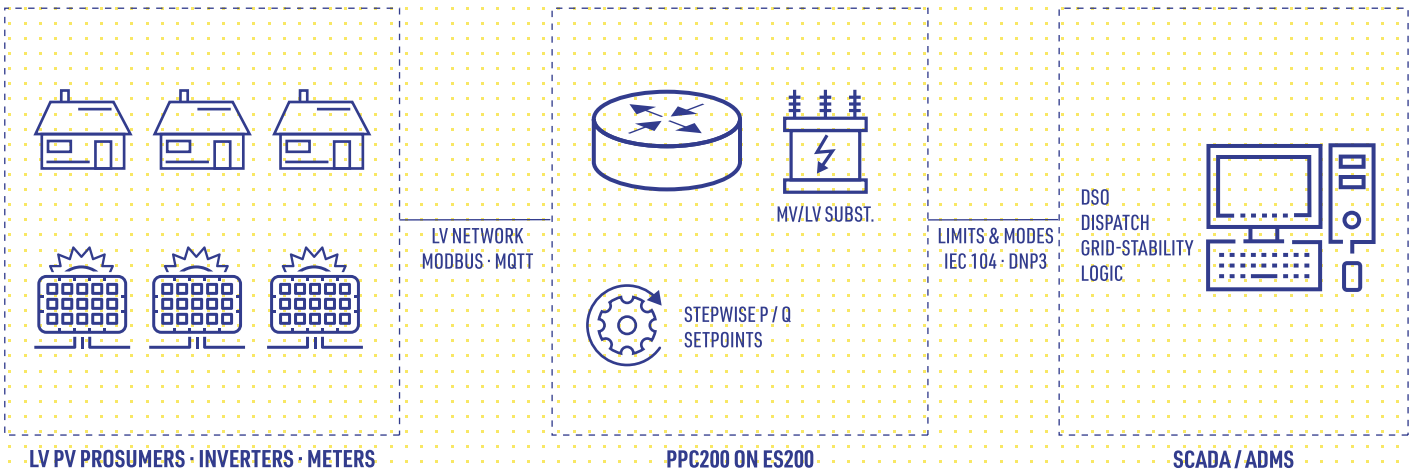
The solution

PPC200 runs on the ES200 in the secondary substation. It reads the measurements at the LV busbar and at the prosumers' meters, receives the active and reactive power limits set by the DSO and sends stepwise, ramped setpoints to the prosumers' inverters or control units. The solution is in production since 2025.

What you get

- One-button curtailment inside the existing SCADA environment
- Stepwise, ramped P/Q setpoints following the DSO's grid-stability logic
- Customers kept connected, grid reinforcement deferred
- Seamless integration with existing inverters and dataloggers

HOW IT WORKS





cisco Compatible

USECASE · EMS200

COMPLEX DER SITE MANAGEMENT

Hybrid PV + wind + BESS plant operated as one unit

EPG EXIMPROD GRUP

The challenge

A hybrid site combines PV inverters with dataloggers, a wind farm with its own controller and a BESS with its BMS. The grid operator sees one connection point and expects one plant that follows setpoints, responds to frequency and keeps its day-ahead commitment.

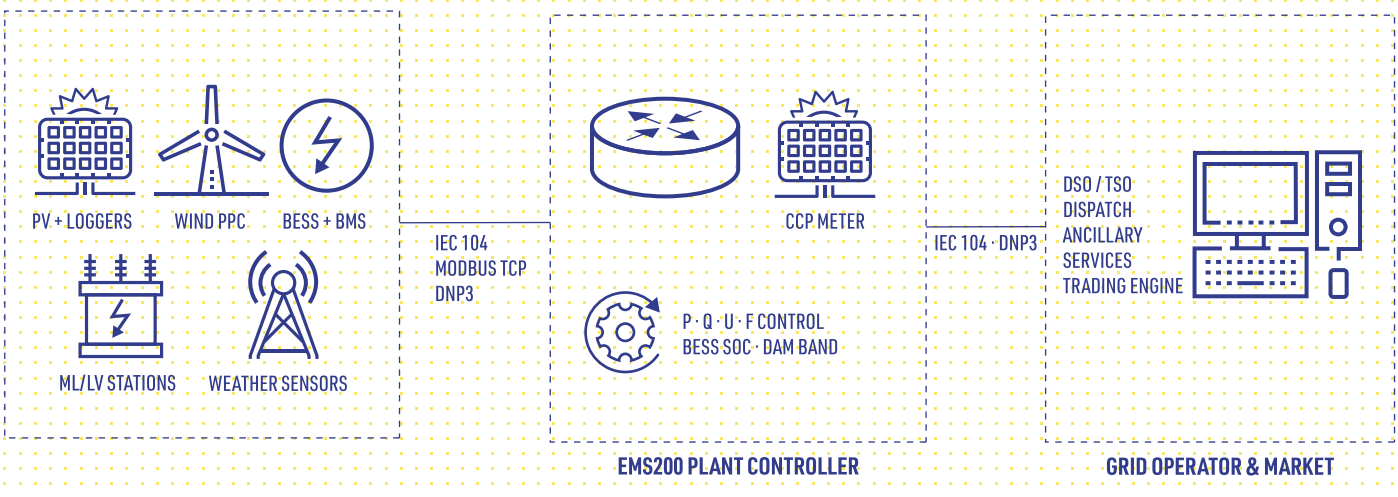
The solution

EMS200 is installed at plant level and coordinates all sources as a single coherent system over IEC 60870-5-104, Modbus TCP or DNP3. It distributes P and Q setpoints proportionally to the rated power of each source, dispatches the BESS to hold the committed band and to answer frequency deviations, keeps the state of charge near its target and provides the local SCADA for the MV/LV stations, weather stations and sensors of the site. Local and remote (DSO/TSO) control modes are switched inside the EMS.

What you get

- Coordinated active, reactive, voltage and frequency control at the coupling point
- BESS covers production shortfalls and frequency events, with configurable dead band and ramps
- Ready for FCR, mFRR and RR ancillary services
- Grid-code compliance tests and reports delivered with the system

HOW IT WORKS





cisco Compatible

USECASE · ES200

MV LINE VOLTAGE REGULATOR CONTROL

Voltage regulation on long medium-voltage feeders

EPG EXIMPROD GRUP

The challenge

Long rural MV feeders with growing distributed generation suffer voltage excursions at both ends of the line. Line voltage regulators correct them, but their controllers are usually isolated from the dispatch and cannot follow the operator's voltage strategy.

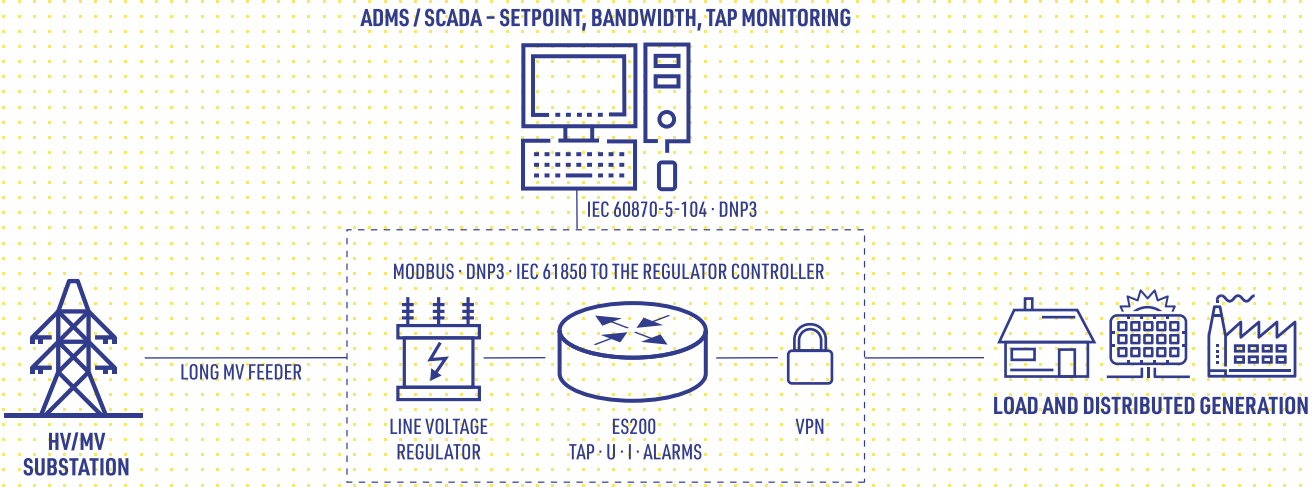
The solution

ES200 connects to the regulator controller (serial or Ethernet, Modbus/DNP3/IEC 61850), acquires tap position, voltages, currents and alarms, and makes them available to the ADMS/SCADA over IEC 60870-5-104 or DNP3. The dispatcher can change setpoints and bandwidth remotely; local automation on the ES200 supervises the regulator and raises alarms on abnormal tap activity or voltage outside limits.

What you get

- Remote visibility and control of every regulator on the feeder
- Voltage profile kept within limits as PV and load patterns change
- Fewer field visits, faster diagnosis
- Same platform and cybersecurity as the rest of the substation fleet

HOW IT WORKS





Compatible

USECASE · ES200

AUTOMATED DISTURBANCE RECORD COLLECTION

COMTRADE files retrieved from the IEDs and centralised for analysis

EPG EXIMPROD GRUP

The challenge

After a fault, the disturbance records needed for the analysis sit in each protection relay. Collecting them by hand is slow, delays the fault analysis and often misses records that the relays overwrite.

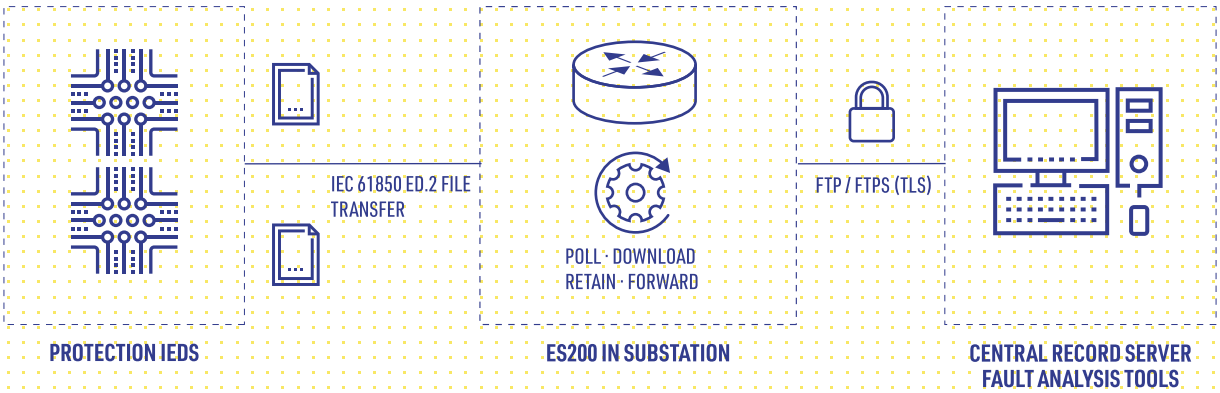
The solution

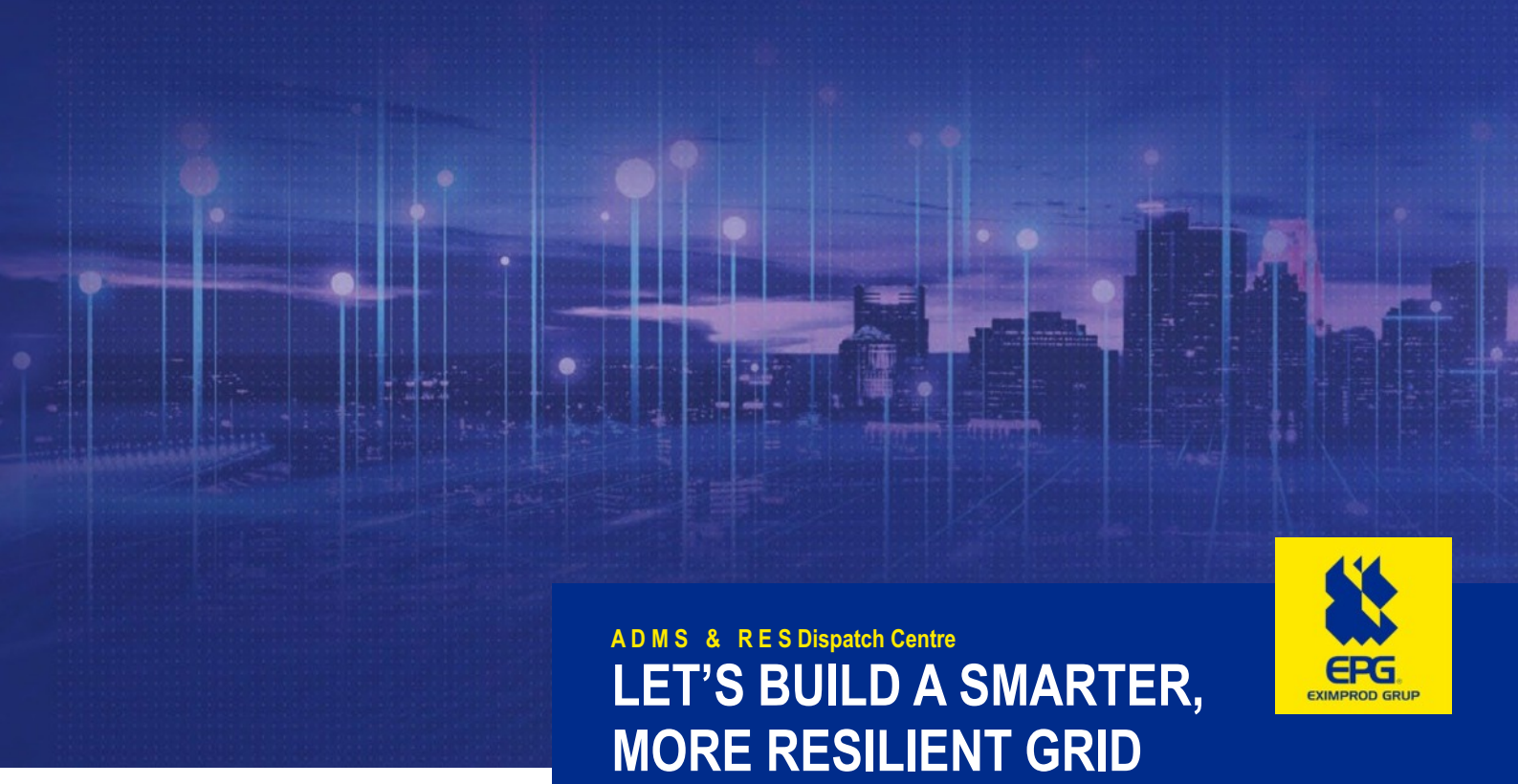
The IEC 61850 Edition 2 client of the ES200 polls the file directory of every IED, downloads new COMTRADE records automatically through the standard file-transfer service and forwards them to a central FTP/FTPS server of the utility. Polling interval, retention time and file size limits are configurable per IED; transfers can be encrypted with TLS and the local copy deleted once delivered.

What you get

- Simplified & centralised management of disturbance records
- Faster fault analysis and audits
- Records available to external analysis tools
- No manual retrieval, no lost records

HOW IT WORKS





ADMS & RES Dispatch Centre

LET'S BUILD A SMARTER, MORE RESILIENT GRID

BUILT FOR TODAY. READY FOR WHAT'S NEXT.

EPG EXIMPROD GRUP

Our approach

Eximprod has contributed to complex ADMS and dispatching projects for distribution operators and energy companies in Romania and the Republic of Moldova, including DEO, DEER, Delgaz Grid, RED Nord and private renewable-energy dispatch centers.

Smarter operations

Bring network data, control functions and operational workflows into one connected environment.

Secure by design

Support business continuity through cybersecurity, high-availability and disaster-recovery architectures.

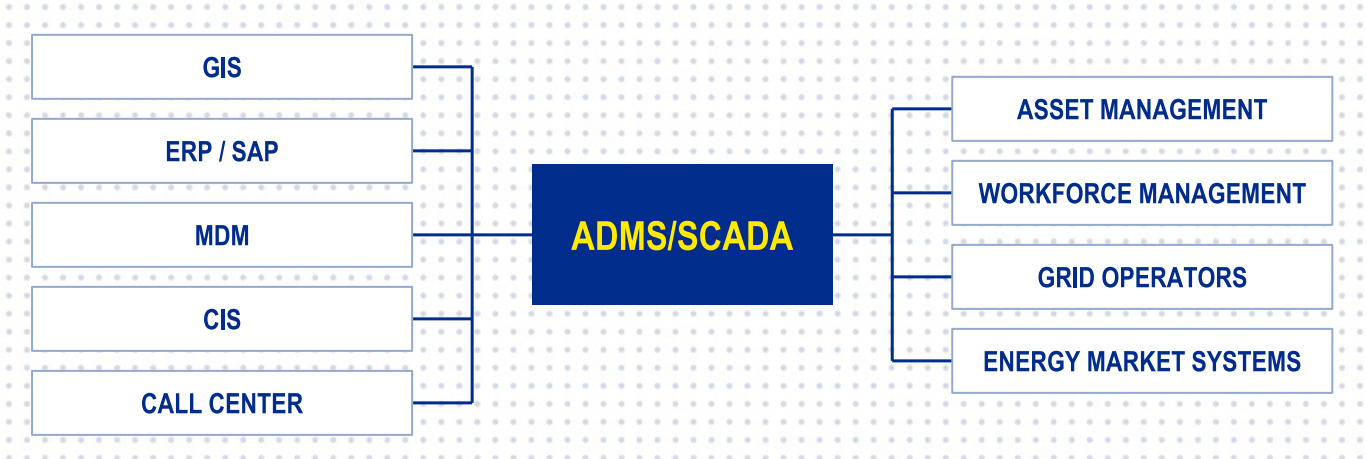
Renewable integration

Manage distributed generation and renewable assets with greater visibility and control.

Faster response

Detect incidents, coordinate interventions and restore service more efficiently.

CONNECTING THE UTILITY ECOSYSTEM





CONTROL · VISIBILITY · RESILIENCE

ADMS & RES Dispatch Centre

INTELLIGENCE AT THE HEART OF THE GRID

EPG EXIMPROD GRUP

cisco Compatible

The challenge

From distribution networks to renewable energy assets, Eximprod connects every layer of modern grid operations.

For DSOs

A unified operational environment integrating SCADA, DMS and OMS to monitor, control and optimize electricity distribution networks.

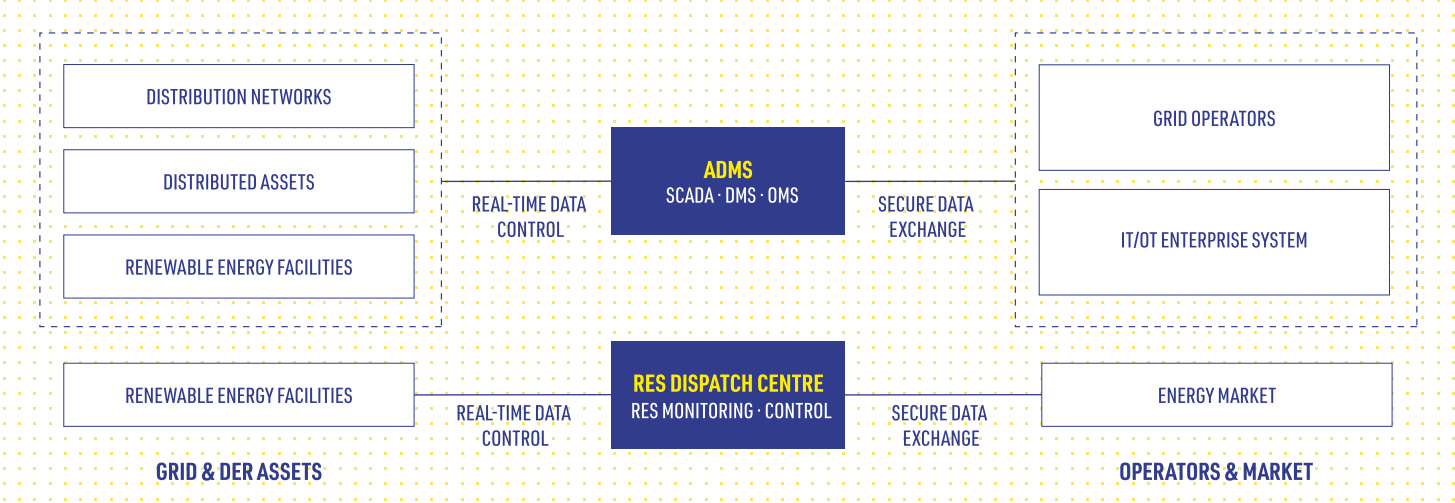
- Real-time network observability
- Faster fault detection and restoration
- Smarter switching and outage management
- Operational excellence
- IT/OT convergence

For RES operators

A centralized solution for monitoring, controlling and dispatching renewable energy facilities and distributed assets.

- Real-time asset supervision
- Centralized operational control
- Energy market data exchange
- Secure communication with grid operators
- Reliable integration of renewable generation

HOW IT CONNECTS



HIGH VOLTAGE · 110–400 kV

MODERN SOLUTIONS FOR HIGH-VOLTAGE SUBSTATIONS

110 - 400kV



The high-voltage portfolio developed and manufactured by Eximprod for modern, safe and reliable substation and overhead line infrastructure, covering 110–400 kV.

Product portfolio

- ZnO surge arresters
- Composite insulators and insulator strings
- Station post insulators
- Interphase spacers
- Capacitive and inductive voltage transformers
- Top-Core and Hairpin current transformers
- Disconnectors

Built to standard

All products are **type-tested** and comply with the applicable standards.

Configurations can be **adapted** to customer and project requirements.

Disconnectors also available in **retrofit-compatible** configurations.

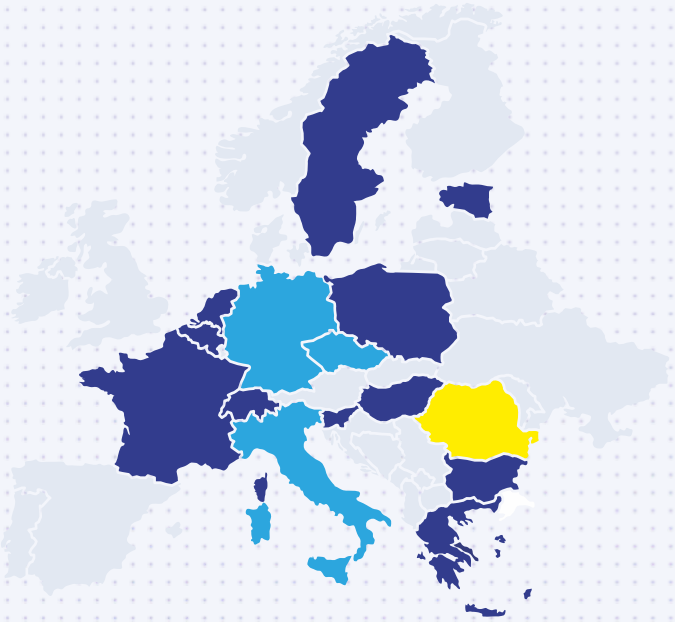
30+ YEARS OF MANUFACTURING

IN-HOUSE DESIGN, TOOLING, MANUFACTURING & TESTING
FROM 0.4 kV TO 400 kV

LOW VOLTAGE	MEDIUM VOLTAGE	HIGH VOLTAGE
10,000,000+	5,000,000+	10,000+
units in operation	units in operation	units in operation

Choose the right solution

Designed to enable the quick identification of the right technical solutions, the catalogue provides essential information regarding the characteristics, applications and advantages of each product. Whether you are a **designer, integrator or grid operator**, it is a practical tool for carrying out efficient, safe and durable projects.



EUROPEAN FOOTPRINT

Eximprod Group brings together engineering, manufacturing and digital companies with 4 manufacturing sites in Romania and local presence in Germany, Czech Republic and Italy.

- 4 MANUFACTURING SITES · ROMANIA
- CUSTOMER FOOTPRINT
- LOCAL PRESENCE · GERMANY, CZECH REPUBLIC, ITALY

EPG EXIMPROD GRUP

Eximprod Group
www.epg.ro · office@epg.ro



EDGE COMPUTING

DIGITAL FUTURE OF ENERGY

EPG
EXIMPROD GRUP

Solutions

Accelerate your digital transformation and optimize your investments by leveraging the benefits of the edge computing software solutions which enable secure monitoring and control capabilities of the distribution grids and integrate with Utility ADMS / SCADA, asset management and analytics applications.

Eximprod Engineering

We develop and implement innovative solutions for energy infrastructure: electrical design and consulting, automation and smart grids, IT / OT solutions, software development, operation and maintenance, and renewable energy power plants.

cisco
Partner
Select Developer

epg.ro/go/edge
b2b@epg.ro



EPG
EXIMPROD GRUP

b2b@epg.ro
epg.ro/go/edge