Renewable energy from solar panels
Solutions for photovoltaic installations
Solutions for large buildings and power plants
In recent years photovoltaic electricity generation has met the growing demand for energy. There is a large concern for clean energy without emissions that impact the environment. Schneider Electric provides a complete set of solutions from DC to grid connections.

Helping you to achieve the lowest cost of energy for your solar farm

Added value from our solutions
Complete set of solutions
Conversion of energy
Electric distribution
Supervision and monitoring
Security (CCTV and access controls)
Engineering, design and project management
Operations and Maintenance services
CAPEX and OPEX optimization
Optional service provided for the life span of the PV array
Performance commitment
Local and international support
Energy efficiency and availability
Specific supervision and monitoring systems for photovoltaic solutions.

Extensive range of inverters
Schneider Electric Xantrex
TM
Inverters from 100 kW to 630 kW.

Scope of the offer
- Grid synchronized inverters
- DC and AC electrical distribution
- MV / LV compact power conversion substations (PV Box)
- MV compact grid connection substations
- Monitoring systems
- Security systems (CCTV, access control...)
- Operation & Maintenance contracts

Engineering
- Project support
  Design, construction and site audit
  Planning, coordination and quality checks
  Commissioning
  Dependability tests

Project
- Site management
  Permitting, environmental and capital
  Public power connection
  Commissioning
  Initial Power Quality assessment
  Gate Table

Operation
- Field line monitoring and alarming
  Data recording, trending and alarming
  Operational maintenance
  Operational and availability
  Escalation Plan and Availability
  Local monitoring

Schneider Electric
A unique partner for every phase of your project

Schneider Electric, a unique partner for every phase of your project

Head Office
35 rue Joseph Monier
CS30323
92506 Rueil-Malmaison
France
Tel.: +33 (0)1 41 29 85 00

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www.schneider-electric.com
renewableenergy@schneider-electric.com

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- Supervision and monitoring
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- Optional service provided for the life span of the PV array
- Performance commitment
- Local and international support
- Energy efficiency and availability

Solutions for large buildings and power plants
- Renewable energy from solar panels
- Solutions for photovoltaic installations
-帮助 you to achieve the lowest cost of energy for your solar farm

Schneider Electric, a unique partner for every phase of your project

Scope of the offer
- Grid-synchronized inverters
- DC and AC electrical distribution
- LV / MV compact power conversions
- substations (PV Box)
- MV compact grid interface substations
- Monitoring systems
- Security systems (CCTV, access control ..)
- Operations & Maintenance contracts

Make the most of your energy

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LV / MV compact power conversions
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MV compact grid interface substations
Monitoring systems
Security systems (CCTV, access control ..)
Operations & Maintenance contracts

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for every phase of your project

Engineering
- Presales support
- Design, architecture and lay-out
- Planning, protection, and monitoring solutions
- Dependability studies
- Solar and wind systems services

Project
- Project management
- Planning, protection and lay-out
- Public work
- Installation and cabling
- Commissioning
- Operations and Maintenance services

Operation
- Field line monitoring and alarming
- Data recording, hosting and processing
- Preventive and corrective maintenance
- Dependability, Safety and Availability
- Local monitoring

Co-saving support from your Photovoltaic Solutions Team
- 2 years warranty for DC and AC inverters
- 10 years warranty for DC protection devices

Head Office
35 rue Joseph Monier
CS30323
92506 Rueil-Malmaison
Tel.: +33 (0)1 41 29 85 00
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Helping you to achieve the lowest cost of energy for your solar farm

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Complete set of solutions
Conversion of energy
Electric distribution
Supervision and monitoring
Security (CCTV and access controls)
Engineering, design and project management
Operations and Maintenance services
CAPRI and OPAL optimization
Optimal service provided for the life span of the PV array
Performance commitment
Local and international support
Energy efficiency and availability
Specific supervision and monitoring systems for photovoltaic solutions.

Extensive range of inverters
Schneider Electric Xantrex TMC
Inverters from 100 kW to 630 kW.

Schneider Electric, a unique partner for every phase of your project

Scope of the offer
- Grid synchronized inverters
- AC and DC electrical distribution
- LV / MV compact power conversion
- Supervision and monitoring
- Security systems (CCTV, access control ...)
- Operations & Maintenance contracts

Engineering
- Project management
- Planning, network and layout
- Public work
- Studies: Initial System, Initial Safety, Initial Pollution, Initial Exceptional Failures assessment

Project
- Engineering
- Presales support
- Design, architecture and lay-out
- Electrical protection and selectivity study
- Lightning protection study
- Dependability study

Operation
- Operation
- Project management
- Planning, scheduling and logistics
- Public work
- Installation and cabling
- Commissioning
- Initial Performance Ratio assessment
- Real time monitoring and alarming
- Data recording, hosting and processing
- Preventive maintenance
- Curative maintenance
- Performance Ratio and Availability Level monitoring

Head Office
35 rue Joseph Monier
CS 30323
92506 Rueil-Malmaison
France
Tel.: +33 (0)1 41 29 85 00

www.schneider-electric.com
www.solutions.pv@schneider-electric.com

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**Turnkey solutions.**

**Packaged solutions.**

- **Features:**
  - Thermally optimized and sealed design
  - AC and DC power conversion
  - Wide DC input voltage range
  - Easy installation and operation
  - Modular design
  - Rapid field commissioning
  - Integrated power factor correction
  - Optional load share controllers

**Grid-tie inverters.**

- **Features:**
  - Operation in rated capacity with high ambient temperatures
  - Communications capability: Modbus RTU, CAN, HTTP, SSH, SNMP
  - Environment options: power tracking (MPPT)
  - Advanced MPPT algorithm to maximize yield
  - Secure and high efficiency power conditioning
  - Panel-level and system-level monitoring
  - Expandable in rating and capacity: low voltage transformer-less therapy

**Monitoring solutions.**

- **Features:**
  - Data acquisition: Voltage, current, temperature, humidity, event log, etc.
  - Data logging: 5-year history
  - Date tagging: 5-year history
  - Data trending and reporting
  - Data availability (von remote internet, subscriptions, etc.)

**Security.**

- **Features:**
  - CCTV surveillance center: Enables remote monitoring
  - Emergency intervention
  - Predictive maintenance
  - Management and supply of spare parts
  -ｇEmergency intervention
  - Preventive maintenance
  - Quick access to the facilities
  - Safety of the personnel

**Service.**

- **Features:**
  - Service throughout the life cycle of your installation
  - Complete surveillance for risk reduction
  - Reaches 100% of its potential
### Turnkey solutions

- **Comprehensive and innovative solutions**
  - Maximum reliability during startup
  - Advanced control and monitoring systems
  - Modular and scalable solutions
  - High-quality materials and manufacturing processes

- **For the entire life cycle**
  - Design
  - Installation
  - Operation

- **Global support**
  - Unlimited services tailored to your needs and backed by our worldwide presence

---

### Packaged solutions

The PV Box can be delivered on a turnkey basis and as a plug-and-play solution. Schneider Electric offers a wide range of packaged solutions that cover the needs of both grid-tie and off-grid systems. These solutions are designed to be efficient, reliable, and cost-effective, ensuring optimal performance throughout the life cycle of your installation.

- **Features**:
  - Power conversion substations
  - DC array boxes
  - Data monitoring and efficiency
  - MV switchgear, metering, and protection
  - Grid supervision, monitoring
  - PT630 E
  - DC combiner box

- **PV Box**
  - **Solution**: 1.5 MW / 1 MW
  - **Rated capacity**: 1.25 MW
  - **Increased efficiency**: 98.3%
  - **Increased life cycle**: 12 years

- **Custom solutions available**

---

### Grid-tie inverters

- **Features**:
  - High efficiency with overgrid protection
  - Advanced grid interconnection
  - Low input voltage range

- **Applications**
  - Grid-tie inverters
  - 2x630 kW
  - 2x500 kW
  - 1x630 kW
  - 1x500 kW
  - 1x250 kW
  - 1x100 kW

- **Benefits**
  - Increased efficiency
  - 100% of your potential

---

### Monitoring solutions

- **Reduction of operational costs**
- **Data acquisition**, **Maintenance**, **Scalability**
- **Complete surveillance** for risk reduction

- **Components**
  - Data acquisition
  - Voltage, current, temperature, humidity, etc.
  - Data logging and monitoring

---

### Security

- **Features**
  - High-quality materials and manufacturing processes
  - Advanced control and monitoring systems
  - High reliability during startup

- **Benefits**
  - Protection against failures
  - Uninterrupted operation during outages
  - High-quality materials and manufacturing processes

---

### Service throughout the life cycle of your installation

- **Features**
  - **Custom solutions available**
  - **Monitoring solutions**
  - **Security**

- **Benefits**
  - Full support throughout the life cycle
  - 24-hour technical assistance
  - End of life cycle

---

**Solution**

<table>
<thead>
<tr>
<th>Solution</th>
<th>Rated capacity</th>
<th>Increased efficiency</th>
<th>Increased life cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x630 kW</td>
<td>1.3 MW</td>
<td>98.3%</td>
<td>12 years</td>
</tr>
<tr>
<td>2x500 kW</td>
<td>1.3 MW</td>
<td>98.3%</td>
<td>12 years</td>
</tr>
<tr>
<td>1x630 kW</td>
<td>0.63 MW</td>
<td>98.3%</td>
<td>12 years</td>
</tr>
<tr>
<td>1x500 kW</td>
<td>0.5 MW</td>
<td>98.3%</td>
<td>12 years</td>
</tr>
<tr>
<td>1x250 kW</td>
<td>0.25 MW</td>
<td>98.3%</td>
<td>12 years</td>
</tr>
<tr>
<td>1x100 kW</td>
<td>0.1 MW</td>
<td>98.3%</td>
<td>12 years</td>
</tr>
</tbody>
</table>
Turnkey solutions

Features:
- Full turnkey solutions on a project basis
- Customized solutions
- Wide range of options
- Low costs
- Time savings
- Guaranteed performance

Our turnkey solutions include:
- System design
- Equipment selection
- Construction
- Testing
- Commissioning

For the entire life cycle
- Maintenance
- Repair
- Replacement

Global support
- Worldwide service
- Local support

Packaged solutions

Features:
- High reliability
- Easy installation
- Maintenance
- Low cost

PV Box 1.5/0.100 kW
Solution: 1.5 MW/1 MW

Custom solutions available

Grid-tie inverters

Features:
- High efficiency
- Long life expectancy
- Low maintenance
- High power density

Monitoring solutions

Features:
- Remote monitoring
- Data analysis
- Energy management
- Security

Service throughout the life cycle of your installation

Reaches 100% of its potential

Data acquisition
- Voltage, current, temperature, humidity, solar irradiance, wind data
- Data logging and analysis
- Data reporting
- Data analysis
- Remote access
- Enhanced communication
- Reduced costs

Security
- CCTV camera control
- Access control
- Intruder detection
- Burglar alarm

Complete surveillance for risk reduction

Service throughout the life cycle of your installation

100% of its potential
**Turnkey solutions**

- Comprehensive and innovative solutions
- Localised services enable support
- For the entire life cycle
- Global support

Our turnkey solutions include:
- Power connection substations
- Grid connection substations
- Monitoring software
- Advanced services

The PV Box is a complete turnkey solution and comprises an integrated software applications and control systems for power tracking and monitoring. It enables a compact design, high efficiency, and scalability. The PV Box is designed for grid-connected PV systems and can be used in combination with other technologies, such as solar thermal systems (CSP) or wind turbines, as well as related maintenance services.

**Grid-tie inverters**

- Rated capacity: 1.25 MW
- Increased efficiency: 96.6%
- End of life cycle services: offers customized services
- Predictive maintenance
- Preventive revisions

**Packaged solutions**

- Features:
  - Reliable and smart inverters
  - Easy installation and operation
  - Reduced maintenance and energy losses
  - Scalable grid services: anti-islanding, VAR compensation, low voltage ride-through

- Solution 1.25 MW/1 MW
- Solution 2x630kW
- Solution 2x500kW
- Solution 1x630kW
- Solution 1x500kW
- Solution 1x250kW
- Solution 1x100kW

**Monitoring solutions**

- Features:
  - Data acquisition: Voltage, current, temperature, humidity, power, etc.
  - Data logging and stamping
  - Computer-aided design: remote access and remote monitoring of the different PV plants

- Complete surveillance for risk reduction

**Service throughout the life cycle of your installation**

- Schneider Electric offers a comprehensive service.

**Security**

- Features:
  - Cabling: single- and double-cable
  - Compact and robust design
  - Molded case and residual current circuit breaker

- Complete protection system: Simplienergy™;

- Complete service package: full-time maintenance and monitoring.

**For the entire life cycle**

- Comprehensive and innovative solutions
- Localised services enable support
- For the entire life cycle
- Global support

- Features:
  - Optimization of CAPEX and OPEX
  - Maintain a high level of operations
  - Maximum quality standards during design, security, monitoring and control

- Solutions: Grid-tie inverters

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  - Preventive revisions

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- Design, architecture and lay-out
- Electrical protection and selectivity study
- Dependability study
- Energy efficiency and availability
- Local and international support

Project
- Project management
- Purchasing, logistics and on-site supervision
- Public works
- Installation and cabling
- Commissioning
- Initial Performance Ratio assessment

Operation
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Head Office
24 rue Jean Monnet
CS 24400
38032 GRENOBLE Cedex 1
France
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