

Life Is On

Schneider
Electric

Services designed for your Power Plant

Schneider Electric Solar Business Services

solar.schneider-electric.com

Our vision, our missions



We are Solar Specialists and We Keep Your Energy On

Our missions

- Maximize energy production efficiently
- Bring smart solutions to your daily operations
- Avoid downtime

A true global solar partner

Global Presence over 110 countries

Field Services experts, 200 Solar services specialists

Local Operation Expertise

Our experts are providing continuous high level support to our teams and customers in order to ensure that PV plants are optimally performing. Since 2000, 10 GW of power is connected to the grid with Schneider Electric utility-scale inverters.

Reliable Service Provider

Services contracted on more than 15 countries. Our flexible contracts are designed to meet customer needs.

15+ years

of experience in Solar

2.8+ GW

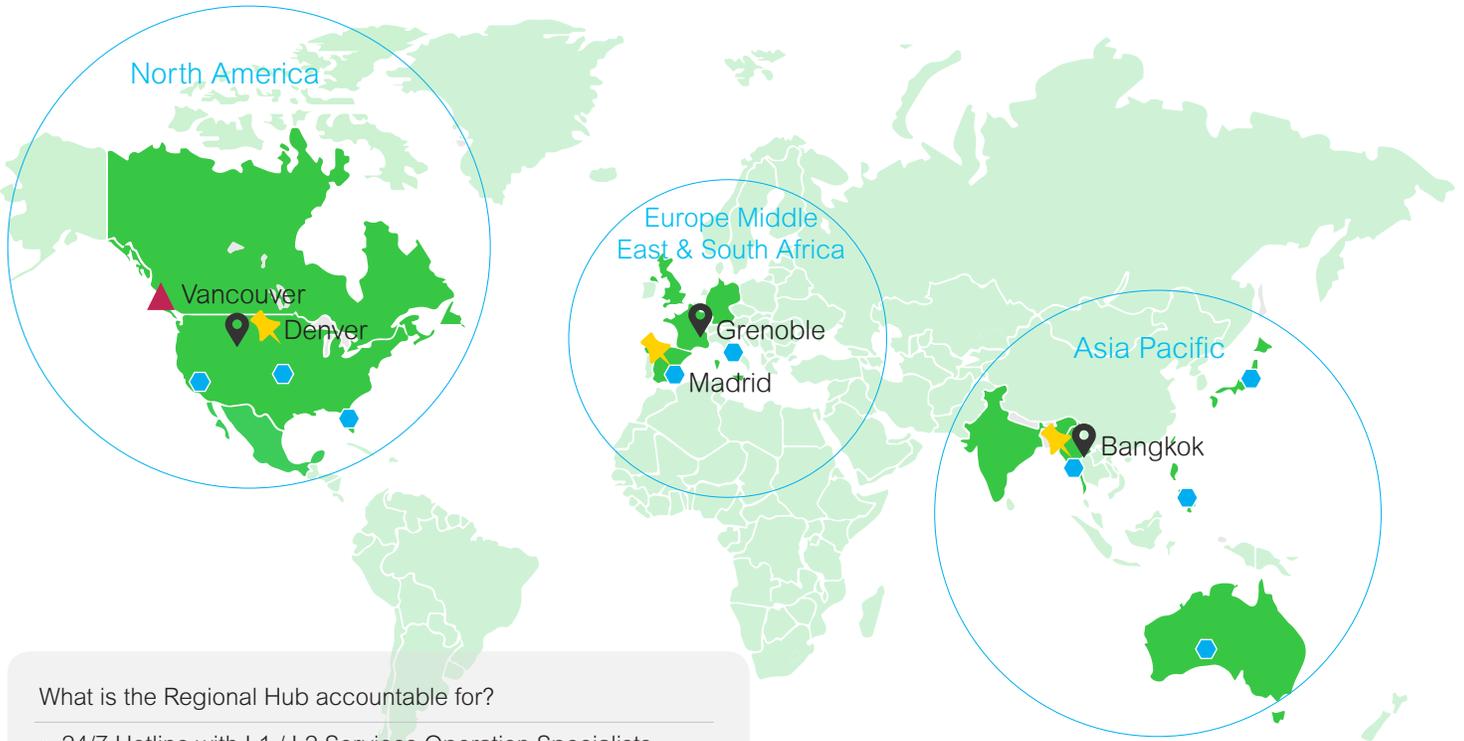
Monitored by Schneider Electric

4.4 GW

under long term service agreements

Who are we?

Solar Business Services Hubs Worldwide



What is the Regional Hub accountable for?

- 24/7 Hotline with L1 / L2 Services Operation Specialists
- Scheduler & Dispatcher
- Dedicated Field Services Engineers
- Dedicated Control Room
- Single Point of Contact for Spare Parts

- Schneider Electric Field Service Engineers
- Dedicated Solar Field Service Engineers
- Regional Hubs
- Regional Hubs Headquarter
- Training centers
- L3 support
- Sustaining team



Control Room in Madrid

Power Plant Services



Utility Scale Inverters

SmartGen Power System (SPS)

NA version
IEC version

Central inverters

SmartGen series
XC series
GT series

You can choose a long-term contract to secure and sustain your assets throughout their lifecycle or an on-demand service to match specific needs.

Customer support

Technical support

Scheduling and dispatching

Periodic inspections and cleaning

Preventive maintenance

Corrective maintenance

Spare parts availability

Schneider university - customer training

Reporting

Response time

We can support your commissioning, supply spare parts, perform preventive maintenance and corrective maintenance, audit your site, train your field technicians or provide on-site / remote technical support whenever needed.

Safety is our priority

We ensure our experts have a full knowledge of safety rules

Sophisticated LOTO (Lockout-Tagout)

- No Live work allowed

Multiple LOTO points to isolate specific areas, creating a way to work on the inverter without full PPE

Ability to access certain areas of the inverter without shutting down operation of the complete skid

- Opening critical cabinet doors will trigger the inverter to stop power production

Access control

- Password protection controls the access rights of users and field service engineers
- All information is pushed to the Cloud for remote diagnosis and degradation monitoring (if system is connected to the Cloud).



A safety form to ensure safe situations on site

- Receive work order
- Study the mission
- Get ready
 - ** Identify the work to be done
 - ** Prepare the work plan
 - ** Prepare the safety equipment

Office



- Arrive to site
- Prepare to execute work task
- Perform site safety inspection

Site



- Download form "Solar Service Schneider Electric"
- Fill the form
- Create the pdf report
- Send report to yourself via e-mail
- Share with dispatcher

iAuditor



- Save the report in your device
- Attach report to work order

DSI



Compliance with standards

For SmartGen inverters

1. Standard IEC 62271-202: High-voltage switchgear and control gear - Part 202: High-voltage/ low-voltage prefabricated substation.
2. Standard IEC 62271-200: High-voltage switchgear and control gear - Part 200: AC metal-enclosed switchgear and control gear for rated voltages above 1 kV and up to and including 52 kV.
3. UL 1741 V/f abnormality and HiPot test.
4. CSA C22.2 107.1 HiPot test.

For PV Box (+ 1&2 from SmartGen)

5. Standard IEC 61439: Low-voltage switchgear and control gear assemblies.
6. Standard IEC 60076: Power transformers - Part 1: General.
7. Standard EN779:2012 -> Particulate air filters for general ventilation - Determination of the filtration performance.

Additional Services

Spare Parts

Our worldwide footprint is designed to optimize logistics flow and supply chain efficiency

Spare Parts Availability

- Quality assurance process applied on all spare parts
- Management of component obsolescence and backwards compatibility
- Re-engineering of printed circuit boards and power electronics sub-assemblies
- Documented spare parts and firmware evolution through service bulletins

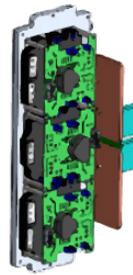
Robust Supply Chain

- Customer inventory management capabilities
- Monitoring of supply chain performance
- Country and regional spare parts logistics centers
- Professional packaging
- Controlled storage conditions and shelf life management

Field Replacement Unit (FRU) approach

We have spare part concept fully designed for services

For each FRU these aspects are analyzed



- FRU Definition
- Useful Life Analysis
- Random Failure Analysis
- Degradation Monitoring
- Hardware and Software requirements
- Diagnostics and First-time Fix
- Reliability Testing
- Service Procedure
- Spare Parts Strategy
- Service Logging Requirements

Schneider Electric University

We train your field technicians for operational excellence with standard operational level courses and advanced preventive and corrective maintenance courses.

Our competency centers deliver proof certificate at completion. Benefit from tailor-made courses in one of our training centers

- North America (NAM)
- Europe Middle East & South Africa (EMEA)
- Asia Pacific (APAC) (opening soon)



We propose standard operational level courses for advanced preventive and corrective maintenance trainings, with hands-on sessions.

Why partner with Schneider Electric Solar Business?

- Our solutions are designed for fast, easy and efficient servicing
- We have adapted our footprint to better attend your needs
- Minimize your total cost of ownership with our service offers
- Advanced analytics capabilities to reduce component failures



Optimal
first time fix rate



24 hours
response time



>25% Downtime reduction
extraordinary efficiency

Hubs Contact

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