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Managing Director Francisco Baraona

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Plant Information for System Migration / Retrofit of Existing PV Plants

We appreciate the completion of the questionnaire in as much as detail as possible. The information provided will help us to find the most efficient solution for merging the PV plant concerned into our SCADA system.

General Plant Coordinates

Plant designation		Type of construction	☐ Ground mounted ☐ Tracking syst. ☐ Roof-top installation
Installed power	kWp (DC power)	Delivery power	kVA (AC power)
Location PV plant (address)		Location PV plant (Geo coordinates)	(e.g., N 52;431634°) (e.g., E 13,538735°)
Technical contact person / project engineer	Name: E-Mail: Tel.:	Delivery address (if different from location of PV plant)	
Local contact person (if different)	Name: E-Mail: Tel.:	Invoicing address	

Existing Data Acquisition and SCADA System (if applicable)

Data logger(s)	☐ functioning properly; no need to be replaced		☐ replacement required
Manufacturer		Type / designation	
SCADA system		Inverters connected to one data logger [qty]	
Data resolution / scan interval [min]		Estimated daily data volume [MByte]	
Access to data logger	☐ direct dial-in via Port forwarding (dial-in access codes for data logger, if known; SSH/FTP, etc.)		
Data fetch (in CSV/XML format) possible via	☐ FTP Pull ☐ HTTP Pull	Data upload (in CSV/XML format) possible via	☐ FTP Push ☐ HTTP Post
Additional info about existing data logging and SCADA system.			

Place of performance and jurisdiction is Berlin
Register Court: Amtsgericht Berlin-Charlottenburg HRB 163298 B

Umsatzsteueridentifikationsnummer DE295424299
Member of Euler Hermes, Bürgel, Dun & Bradstreet

Deutsche Bank AG Bank Code: 860 700 00 / A/C No.: 54 16 847
BIC DEUTDE8LXXX / IBAN DE46 860 700 00 054 168 4700

Berliner Sparkasse Bank Code: 100 500 00 / A/C No.: 660 407 0113
BIC BELADEBE / IBAN DE89 100 500 00 660 407 0113

Internet Connection and Power Plant Data Communication Network

Internet	☐ DSL ☐ LTE ☐ UMTS ☐ SatDSL	Static IP or DynDNS	
Internet provider		Upload rate [kBit/s]	
☐ Dial-in into plant network possible? (Port forwarding)		Internal router IP	
☐ Login data available (Data logger, router, server, etc.)		Router (make / type)	
Plant network infrastructure	☐ FOC (multi mode) ☐ WLAN	Cable type	
	☐ FOC (single mode) ☐ Copper cabling	Ethernet switch (make / type)	
☐ Server / PC available on site			
Internal Server/PC IP		Server / PC (make / type)	
Additional info about plant communication network			

Inverters (INV)

Manufacturer		Type / designation	
No. of INV stations		Firmware version	
No. of INV in every station			
Data interface	☐ Ethernet ☐ RS485/422 ☐ RS232	Data communication cable (type)	
	☐ CAN ☐ other:	Max. cable length [m]	
Additional info about the installed inverters			

String Combiner Boxes (SCBs)

Manufacturer		Type / designation	
No. of SCBs connected to one inverter		Data connection to	☐ Data logger ☐ Inverter
Data interface	☐ Ethernet ☐ RS485/422 ☐ RS232	Data communication cable (type)	
	☐ CAN ☐ other:	Max. cable length [m]	

Modules

Manufacturer		Module type	
Quantity, modules		Module, rated power [W]	
No. of modules in series (string)		No. of strings connected to one inverter	
Additional info about SCBs and modules			

Existing Ambient Sensors and Switchgear

Irradiation	☐ Pyranometer ☐ Reference cells	Orientation	☐ Module level ☐ Horizontal level
Qty. irradiation sensors		Manufacturer / type	
Output signal	☐ Extra-low voltage (0 to 150 mV)	Cable type	
	☐ Other:	Max. cable length [m]	
Temperature	☐ Module temp. ☐ Ambient temp.	Qty. temperature sensors	
Temp. sensor type	☐ Resistance thermocouple (PT1000)	Manufacturer / type	
	☐ other:	Cable type	
Dry contacts (e.g., status, switch, alarm signals)		Signal type /designation	
Device to be integrated		Location of the device	
No. of signals		Max. cable length [m]	
Other ambient measurement	☐ Wind ☐ Precipitation ☐ Other	Manufacturer / type	
Interface(s)		Number of sensors	
Additional info about existing sensor equipment			

Existing Energy Meter(s)

Manufacturer		Designation	
Model /serial no.		Location of installation / voltage level (LV/MV/HV)	
Owner	☐ Plant operator ☐ Utility company	Interfacing via	☐ S0 ☐ RS485* (half duplex)

Transducer factors energy meter	Current transducer		[primary/secondary] e.g., 100 A/5 A
	Voltage transducer		[primary/secondary] e.g., 20 kV/100 V
S0 interfaces (max. 2 connected to one EnergyGuard)	Measurement 1		Energy pulse constant (e.g. pulses/kWh or pulses/kVarh)
	Measurement2		

* Please consult our compatibility list at www.skytron-energy.com

Additional info about existing energy meters	

Power Plant Control (if applicable)

Power plant control	☐ to be implemented by skytron	☐ by third-party supplier	☐ no power plant control required		
Utility company					
Control requirements	☐ Active power reduction	☐ cos φ control	☐ Other:		

Please provide the technical specifications of the utility company concerned. (Grid connection code/Grid connection spec./approval, …)

Additional info about plant control	

Technical Documents

Please provide the following technical documents, data sheets, if available:

- ■ Plant layout plan
- ■ Plant network plan
- ■ Monitoring block diagram
- ■ Single-line diagram
- ■ String layout plan
- ■ Geographical plan
- ■ Data sheets of all components currently installed

Photos of all components, electrical cabinets, stations (if possible, neatly categorised according to stations).

It is important for us to know the physical distances between inverter stations, energy meter cabinets, switchgear cabinets and transmission station. Ideally, the plant layout plant will provide this information.

Additional Remarks about the PV Plant

Please send the completed form to skytron® energy GmbH:

- e-mail: sales@skytron-energy.com
- fax: +49 30 338 430 99

We thank you for your support and for the effort you have taken in compiling this information.
Please rest assured that all information given to us shall be handled under strict confidentiality.