



Request for Commissioning (Monitoring and Plant Control System)

The following information is required for successful plant commissioning as well as for efficient plant-specific configuration of the PVGuard user interface.

General

Plant name	<input type="text"/>	skytron® energy project number	<input type="text"/>
	<input type="text"/>	Requested date of commissioning	<input type="text"/>
Plant coordinates	(e.g. N 52,431634°) <input type="text"/>	On-site contact person/ Contact person for the on-site checklist (page 3) (Email + Phone contact)	<input type="text"/>
	(e.g. O 13,538735°)		

Commissioning Prerequisites

All skytron® energy components have been completely mounted	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Data, supply, and PE cables have been connected	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Supply voltage (230 V AC) is available in all stations	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Inverters have been configured and are able to communicate	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Fibre-optic cable has been spliced and splice box is available	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Internet connection is working and stable	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Third party devices installed, configured and connected to skytron monitoring	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
For plants with plant control:		
Grid analyzer has been installed and connected to MV/HV through CTs and VTs; Grid analyzer is connected via Ethernet to the plant network	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>
Utility interface (remote control system) has been installed and is working	<input type="checkbox"/> Yes <input type="checkbox"/> No, target date	<input type="text"/>

IMPORTANT: Commissioning cannot be completed without these requirements fulfilled. A second commissioning date or additional remote support becomes necessary at your expense. Please take note.

PVGuard®

PVGuard® license purchased :	<input type="checkbox"/> Yes <input type="checkbox"/> No	PVGuard® already in use by invoice recipient :	<input type="checkbox"/> Yes <input type="checkbox"/> No
PVGuard® invoice recipient	<input type="text"/>		
Name account 1	<input type="text"/>	Access rights*:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
Name account 2	<input type="text"/>	Access rights*:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
Name account 3	<input type="text"/>	Access rights*:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

*Level 3 contains full reading and writing authorization (supervisor's access)
 *Level 2 contains only reading permission, therefore alarms are not confirmable (technician's access)
 *Level 1 offers a broad overview of a plant's functionality with no alarms (investor's access)

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

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

Value Added Tax Identification DE295424299
 Member of Euler Hermes, Bürgel, Dun & Bradstreet

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

Plant Topology

Please fill out the provided **table "Plant Topology"** with the following information to enable us to design the plant view according to your wishes: **Names of inverter stations, inverters, combiner boxes, etc. / Nominal power and installed DC power of inverters / String allocation table on combiner boxes / Serial numbers and IP/Fieldbus addresses of inverters**

Filled out table „Plant Topology“ is attached

IMPORTANT: skytron® energy is not able to arrange any commissioning dates without this information. Please support us in organizing a successful commissioning according to your needs.

Layout Plan

Please make sure to submit a **layout plan** to be integrated into the SCADA software (PDF or DWG format).

Layout plan ist attached

No layout plan in PVGuard desired

Internet Connection

Internet connection DSL LTE UMTS SatDSL Static IP / DynDNS-Address

Internet provider Upload rate [kBit/s]

Plant Control

Connection power agreed with the grid operator (reference value for power curtailment) [kW]

Transducer factors of grid analyzer Current transducer [primary/secondary] e.g. 100 A/5 A

(Janitza) Voltage transducer [primary/secondary] e.g. 20 kV/100 V

Energy Meter

Manufacturer Designation

Label or Serial No. Location of installation / Voltage level (LV/MV/HV)

Owner Plant operator Utility company Interface S0 RS485 (half duplex)

Transducer factors of energy meter Current transducer [primary/secondary] e.g. 100 A/5 A

Voltage transformer [primary/secondary] e.g. 20 kV/100 V

S0 interfaces (2 per EnergyGuard can be connected) Measurement 1 Pulse constant e.g., pulses/kWh or pulses/kVarh

Measurement 2

Remarks

Please send the completed form to skytron® energy GmbH:

- by email to project@skytron-energy.com

Thank you very much in advance for your kind cooperation. Be assured that all information will be treated confidentially.

skytron[®] energy Technician: On-Site Checklist during Commissioning (Monitoring and Plant Control System)

The following information will be verified by the on-site technician of skytron[®] energy and sent to the customer contact person during the first day of commissioning. The checklist has to be confirmed by the customer contact person with a signature in the signature box below.

General

Plant name	<input type="text"/>	skytron [®] energy project number	<input type="text"/>
Plant coordinates	<input type="text"/>	Date of commissioning	<input type="text"/>
	(e.g. N 52,431634°)	On-site contact person/ Contact person for the on-site checklist (Email + phone contact)	<input type="text"/>
<input type="text"/>			
	(e.g. O 13,538735°)		

On-site commissioning Prerequisites Check-List

All skytron [®] energy components have been completely mounted	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
Data, supply, and PE cables have been connected	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
Supply voltage (230 V AC) is available in all stations	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
Inverters have been configured and communicate (information given by customer)	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
Fibre-optic cable has been spliced and splice box is available	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
Internet connection is working and stable	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
Third party devices installed, configured and connected to skytron monitoring	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
For plants with plant control:		
Grid analyzer has been installed and connected to MV/HV through CTs and VTs; grid analyzer is connected via Ethernet to the plant network	<input type="checkbox"/> Yes <input type="checkbox"/> No, comment	<input type="text"/>
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Confirmation signature

Date and Place	<input type="text"/>	Customer contact person and signature	<input type="text"/>
Date and Place	<input type="text"/>	skytron energy contact person and signature	<input type="text"/>

Please send the completed form to skytron[®] energy GmbH:

- by email to service@skytron-energy.com and to project@skytron-energy.com

Thank you very much in advance for your kind cooperation. Be assured that all information will be treated confidentially.