



Solar Power Solution

Overview

GeoSIG's solar power solutions provide reliable and independent power supply for remote locations. And we can offer customised solutions to meet customer needs.

The size of the solar panel depends on the power requirements of the installed GeoSIG components. In addition, we consider additional factors such as the geographical location, environmental conditions, your project design, and autonomy requirements. Based on the information, we calculate the optimum system capacity and design-suitable solar power solution for each site and system.

Key Features

- ▶ Field-proven design
- ▶ High reliability and flexibility
- ▶ Solar power solutions that are suitable for harsh environmental conditions
- ▶ Secure housing for all environments



Typical solar power installation

Typical Installation

The solution is flexible in order to meet your needs. A typical solar power installation includes:

- ▶ solar panel and pole fixation kit,
- ▶ solar charge controller including
- ▶ overvoltage protection (OVP) and battery.

Our solar power solution is fully compliant with the complete range of GeoSIG instruments.



Typical solar power installation including lightning protection system

Optional

- ▶ field housing
- ▶ mast
- ▶ lightning protection system
- ▶ special accessories per request

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Components

Solar Panel

Power: 1000 V/m/s differential (2 x 500 V/m/s)
 Current: 20 mm/s (± 10 mm/s) nominal output
 Voltage: 15 - 22 V
 Weight: 7 - 10 kg
 Temperature range: -40 °C to +85 °C
 Power warranty: 20 years



Solar Panel Mast Kit

Pole fixing set for solar modules
 Pole diameter: 7 - 10 cm



Solar Charge Controller

Includes separate OVP for solar power (all 35mm DIN mountable)

Rated solar input: 5 - 20 A
 Rated load: 5 - 20 A
 Regulation voltage: 12 - 24 V
 Max panel voltage: 30 V (in 12V system)
 Self-consumption: < 4 mA
 Temperature range: -40 °C to +50 °C



Battery

Maintenance free
 Capacity: 12 V / 24 - 100 A



Please note that solar components are frequently changed / improved by the manufacturers, therefore the context of this document is to provide an overview of typical characteristics. Depending on the particular system supplied the components may differ from the ones shown.