



# SD03

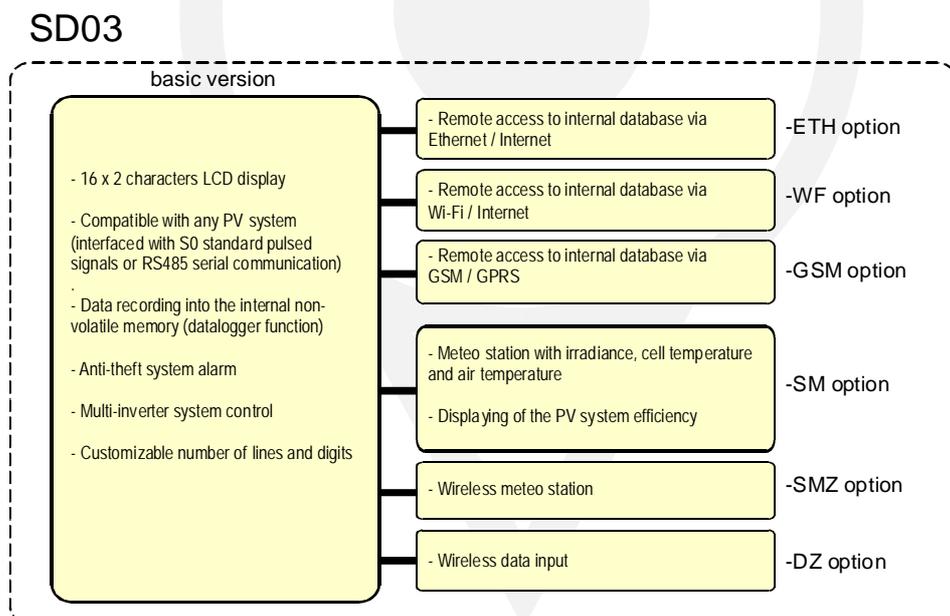
Visualization & control system for PV plants

The SD03 unit belongs to the SmartDisplay product line, a series of intelligent displays characterized by the presence in a single device of advanced features as datalogging, alarm and remote control. SD03 visualizes the main variables of a photovoltaic system on its LCD display and at the same time it is able to store data, making them externally available via standard communication interfaces.

SD03 can send warning messages in case of poor performance of the PV plant or in case of tampering of the same.

SD03 can easily be applied to any existing photovoltaic plant; it is sufficient to use a simple standard pulse signal generated for example by an energy meter. Alternatively SD03 can read the production data via a RS232/485 serial interface directly from one or more inverters (1) or via ZigBee wireless link.

The block diagram below shows the main functions of the SD03 unit depending on the requested options:



(1) Note: the list of inverters supported by the SmartDisplay family is under upgrading, see the website for the latest version.

## Ordering codes:

SD03 -

	Options
ETH	Ethernet remote access
WF	Wi-Fi remote access
GSM	GSM/GPRS remote access
SM	Meteo Station (RS485)
SMZ	Meteo Station (wireless)
DZ	Wireless data input

Example:

SD03- WEB - GSM

Wi-Fi/Internet and GSM remote acces enabled.

Different combinations can be set at any time via software by the user choosing the values from the following table:

	Visualizable values
1	Active Power (kW/100)
2	Active Energy (kWh)
3	CO2 avoided (kg)
4	Income (eur, \$)
5	Days of production (N)
6	Irradiance (W/m2)
7	Cell Temperature (°C/10)
8	Air Temperature (°C/10)
9	Overall Efficiency (%)
10	Equivalent oil barrels (N/10)
11	Equivalent oil ton (N/10)
12	Daily Energy (kWh/10)
13	Aux Power (kW/100)
14	Daily Max Power (kW/100)

## Technical specifications

### VALUES DISPLAYED

Pre-selectable via software (any line can be associated with any value shown in the table)

### METEO DATA INPUT

RS485 interface or ZigBee wireless link

### POWER AND ENERGY DATA INPUT

Standard pulse interface (S0 DIN 43864 / class A IEC 62053-31) or RS232/485 interface or ZigBee wireless link

### DISPLAY

LCD 16 x 2 characters, 7 mm digit height

### POWER SUPPLY

12 Vdc (10,8...13,2 Vdc)

20 mA (typ. central unit)

### TEMPERATURE RANGE

-10°...55°C operative (RH max 85% at 25°C)

-20°...60°C storage

### DEGREE OF PROTECTION

IP20

### DIMENSIONS

157 mm x 90 mm x 60 mm

### MECHANICAL STRUCTURE

PC/PPO modular 9U for DIN EN 50022

### WEIGHT

~200 g



Under a policy of continuous improvement, OptiVeloX reserves the right to make unannounced changes to the specifications of the products described in this document.

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