



# SGC inverter series

- hf transformer
- input voltage up to 800 V
- touch screen
- built-in data loggers

# SGC inverters: the best choice

## advanced technology

SGC inverters feature advanced design and superior performance. **High input voltage** range ensures excellent flexibility in configuring photovoltaic fields.

**A high frequency transformer** guarantees galvanic separation, and significantly reduces the inverter's weight and consumption compared to units with conventional transformers. The SGC series of inverters is **compatible with all types of photovoltaic module** including thin film modules.



## universal communication

SGC inverters include provision for data transmission via **Ethernet** or **CAN bus**. This means that you can monitor every aspect of your photovoltaic plant from your PC, wherever you are.

SGC inverters are also equipped with **built-in data loggers** to record field operating data. Recorded data can then be copied quickly and easily to a **USB** memory stick. Communication and storing capability can be improved by optional accessories.



## all the energy is for you

SGC inverters have been developed using carefully selected technical solutions to guarantee **excellent efficiency** from a lightweight and compact package. A **wide range of string input voltages** and Selco's new **SmartTrack** algorithm allow SGC inverters to carry on functioning at full power even in poor lighting conditions. SGC inverters are also available in **versions equipped with two MPPT trackers**. This makes PV field configuration as flexible as possible by permitting strings to be set up with different azimuths, tilts and dimensions.



SGC 20

SGC30

SGC40

SGC60

**Inputs (DC)**

Maximum power	2,3 kW	3,45 kW	4,65 kW	6,31 kW
Maximum voltage	800 V	800 V	800 V	800 V
PV voltage range, MPPT	200 V – 700 V	200 V – 700 V	200 V – 700 V	200 V – 700 V
Maximum input current (per MPPT)	11,6 A	17,3 A	23,2 A	31,5 A
Maximum number of MPPTs	1	1	1 ● / 2 ○	2 ●
Maximum number of strings	2	2	4	4

**Outputs (AC)**

Grid connection	Single phase	Single phase	Single phase	Single phase
Rated power	2 kW	3 kW	4 kW	6 kW
Maximum power	2,2 kW	3,3 kW	4,4 kW	6 kW
Nominal voltage range	230 Vac ± 15%	230 Vac ± 15%	230 Vac ± 15%	230 Vac ± 15%
Maximum output current	9,6 A	14,3 A	19,1 A	26,0 A
Grid frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz

**Efficiency**

Maximum efficiency	95,5 %	95,5 %	95,5 %	95,5 %
European efficiency	94,5 %	94,5 %	94,5 %	94,5 %

**Protection devices**

DC polarity inversion	●	●	●	●
Galvanic separation	●	●	●	●
AC short circuit protection	●	●	●	●
Protection class/Overvoltage category	I / III	I / III	I / III	I / III
Interface protection	●	●	●	●
Isolation test	●	●	●	●
DC disconnecting switch	○	○	○	○

**Equipment**

DC connection (quick connector)	●	●	●	●
AC connection (quick connector)	●	●	●	●
Interface (USB / CAN bus / Ethernet)	● / ○ / ○	● / ○ / ○	● / ○ / ○	● / ○ / ○
3.5" graphic touch screen display	●	●	●	●
Signalling relay	●	●	●	●

**General data**

Operating ambient temperature	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Protection for electronic circuits/connector compartment	IP 65 / IP 54	IP 65 / IP 54	IP 65 / IP 54	IP 65 / IP 54
Installation	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor

**Warranty and certificates**

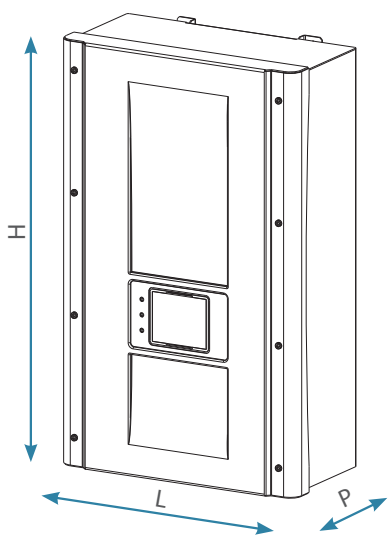
Duration (5 / 10 / 15 / 20 years)	● / ○ / ○ / ○	● / ○ / ○ / ○	● / ○ / ○ / ○	● / ○ / ○ / ○
Certificates and approvals	CE / Enel Guida	CE / Enel Guida	CE / Enel Guida	CE / Enel Guida

● standard — ○ optional



### touch screen (TS) user interface

The user interface of SGC inverters is provided by a generous 3.5 inch **touch screen display** with clear and intuitive graphics. This screen allows operating data to be read clearly, and parameters to be set quickly and easily. Access to data is guaranteed even if no voltage is available from the photovoltaic field. Three signalling LEDs provide a quick read-out of the inverter's functioning status. SGC inverters can be interconnected and configured in **Master/Slave automatic mode** and to allow a number of inverters to be managed from anyone of the control panel of the connected inverters.



### quality and robustness

Selco has carefully selected the materials of the inverter casing to ensure long term reliability under all ambient conditions. SGC inverters have an IP65 protection grade and are therefore suited to **indoor** or **outdoor** use.

	SGC 20	SGC30	SGC40	SGC60
L mm	350	350	350	350
H mm	590	590	590	610
P mm	166,5	166,5	166,5	166,5
Weight Kg	< 15	< 15	< 20	< 25



### safety and simplicity

SGC inverters are extremely safe devices thanks to a number of integrated protection devices including **galvanic separation**, isolation testing, interface protection, **string polarity inversion protection**, and AC side short circuit protection devices. All SGC inverters are equipped with a protection device that intervenes in the event of a power supply malfunction or over-temperature. SGC inverters come with wall mounting flanges and clearly marked electrical terminals, and are quick and easy to install.

# selco energy: decades of experience in inverter technology



selco was set up in the late 1970s

Selco has been manufacturing inverters since its earliest beginnings, first for industrial applications and later for the alternative energy sector.



selco boasts enviable experience in inverter technology

From the outset to the present day, Selco has sold thousands of inverter based systems. Selco dedicates special care and attention to the development of innovative solutions capable of combining functionality and safety, and to the manufacturing and standardisation of components. Selco's ultra-modern electronics R&D centre designs and develops all the software and hardware for Selco products.



selco's R&D labs carry out rigorous tests on all new solutions to continually improve product performance

Selco's R&D centre is continuously engaged in the testing of new solutions to improve performance and safety. Selco has registered numerous industrial patents and works hand in hand with university research institutes on the development of innovative technologies.

