

# CDP

Dynamic  
Power Controllers

*Control your self-consumption installation*



Certification according UNE 217001-IN

# Control, optimize and legalize your photovoltaic installation for self-consumption

**CDP-0**, **CDP-G** and **CDP-DUO** are the devices that control injection into the grid, whether in self-consumption installations or in installations with alternative power supplies.



Regulation of the generation levels of an inverter in a photovoltaic energy system.



Remote monitoring via web (PC, tablet, smartphone) + SCADA integration.



Double protection against grid injection.



Certification according to **UNE 217001-IN**

# CDP-0

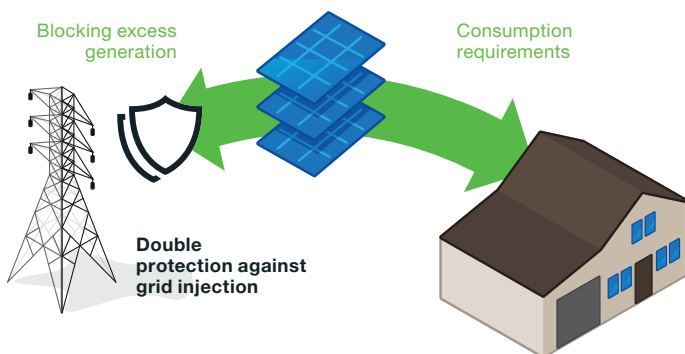
Dynamic power controller  
with  $\emptyset$  injection.



The units of the **CDP-0** range are responsible for regulating the production of solar inverters in any photovoltaic energy system with instantaneous self-consumption, in order to guarantee zero injection into the grid.

The main performance features of this unit are:

- › Management of single or three-phase systems
- › Regulation of single or three-phase inverters
- › Possibility to manage one or more inverters at the same time
- › Datalogger logs downloadable in .csv format:
  - › Consumption
  - › Photovoltaic energy production
  - › Consumption from/Injection into the electrical grid
- › Online monitoring of the energy flows via Web
- › MODBUS/TCP communications integrated in SCADA applications.
- › Certification according to **UNE 217001-IN**.



# CDP-G

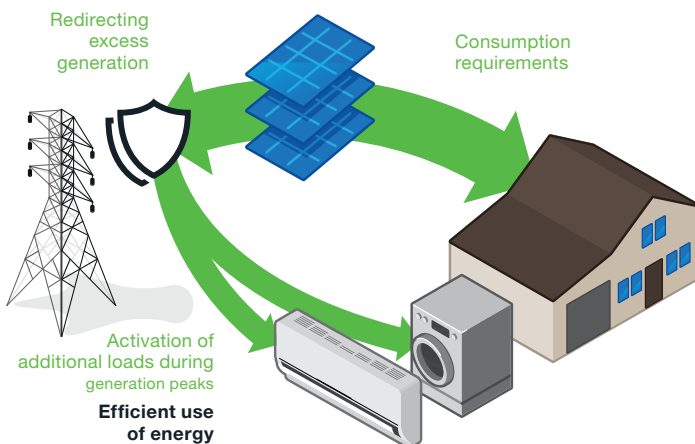
Dynamic power controller with demand management.



The **CDP-G** has all of the performance features of the **CDP-0**. In addition, it incorporates 3 relay outputs allowing all PV power available. The connection of non-critical loads during hours of high insolation reduces the electrical grid dependency and energy costs.

This is the perfect unit for installations with photovoltaic energy production systems for self-consumption and where the consumption of surplus system energy for loads can be optimised, such as for example:

- › Management of heat pumps (aerothermal or geothermal)
- › Water heating with the use of thermoaccumulators (swimming pools, homes)
- › Water pumping and irrigation applications
- › Production of compressed air.
- › Certification according to **UNE 217001-IN**.



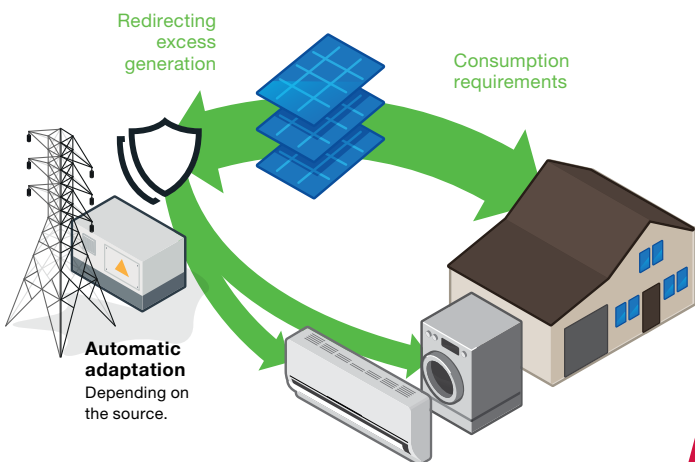
# CDP-DUO

Dynamic power controller with **dual configuration** for hybrid installations.



**CDP-DUO** is the most advanced model of dynamic power controllers, designed to control hybrid installations (powered by two alternative power sources). The unit measures the consumption of the user at all times, thanks to its dual configuration, regulating the inverters to adapt the solar energy generation to the type of network and/or generator installed.

- › Identifies the type of network and adjusts regulation according to this.
- › Automatic switching of the configuration according to the alternative power source present, whether it is a main power supply or alternative power supply.
- › Modbus/RTU communication protocol RS-485 port, enabling remote control of the installation.
- › Power factor correction (if the inverter allows)
- › Certified according to standard **UNE 217001-IN**.



## Technical features

<b>Power supply circuit</b>	Rated voltage	230 Vac (80...115%)
	Frequency	50...60 Hz
	Consumption	6 VA / 6 W
	Rated voltage	12 Vdc
<b>Voltage measurement circuit</b>	Measurement margin	10...300 Vac
	Frequency	50...60 Hz
<b>Current measurement circuit</b>	Nominal current	.../250 mA
	Maximum current	.../300 mA
<b>Accuracy class</b>	Power	0.5%
	Energy	1.0%
<b>Relay outputs</b>	Number	4
	Type	Potential-free
	Maximum operating current	6 A
<b>Communications</b>	User interface	Ethernet
	Communication with the inverter	RS-232, RS-485, RS-422
	Communication with Power Analyzers	RS-485
<b>Build features</b>	Dimensions	6 DIN rail modules
	Enclosure	UL94 – V0 self-extinguishing plastic
	Weight	250 gr
<b>Environmental conditions</b>	Operating temperature	-25...+70 °C
	Relative humidity	95% without condensation
<b>Standards</b>	<b>IEC 61010-1:2010, IEC 61000-6-2:2005, IEC 61000-6-4:2011.</b>	

## Referencias

Type	Code	Description
<b>CDP-0</b>	<b>E51001</b>	Dynamic Power Controller, with zero injection into the grid.
<b>CDP-G</b>	<b>E52001</b>	Dynamic Power Controller with demand management
<b>CDP-DUO</b>	<b>E51002</b>	Dynamic Power Controller with dual configuration