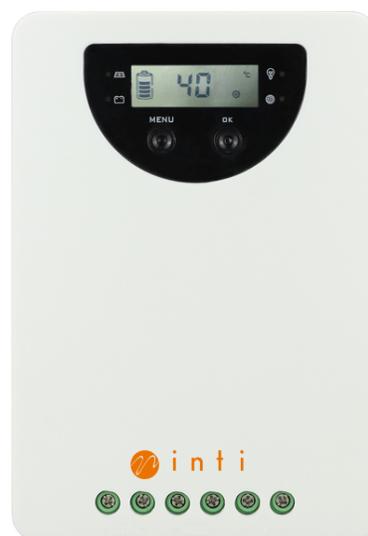


CONTROLLER

CEDRO+

LITHIUM GENERATION

ICC-6048150 +



The Cedro controller is a controller designed with a power unit integrated with different interface modules to meet a variety of functional requirements. The Cedro's optimized MPPT control algorithm ensures a minimum rate of power loss and quickly tracks the system's maximum power point to obtain the maximum solar energy from a single PV arrangement under any environment.

The Cedro controller adopts a 3-stage charging mode suited to lithium, lead-acid or user-defined batteries. It also features natural cooling and an electronic protection function that extends battery life by improving overall system performance.

This Cedro controller has optional communication through external Bluetooth module for display of the solar system's charge and discharge

MPPT maximum efficiency	>99,9%
Standby consumption	0,2W
Heat dissipation method	natural cooling
System battery voltage range	Lead acid: 10,8V-15V @12V; 21,6V-30V @24V; 43,2V-60V @48V Litio: 9,6V - 64V
Admissible photovoltaic range	0-150V
Vmpp minimum voltage	Voltage Battery + 2V
Charging start voltage	Voltage Battery + 3V
Low input voltage protection	Voltage battery+ 2V
Overvoltage protection	150VDC
Overvoltage recuperation	145VDC
Nominal PV power	750W @12V; 1500W @24V; 3000W @48V
Lithium battery activation	Optional
Battery type (gel default)	Gel, AGM, lithium
Rated load current	60A
Temperature compensation	-3mV/°C/2V
Charging method	3 stages: CC, CV, CF (floatation charge)
Output stability precision	±0,2V
Charging voltage	
Rated current load	30A
Load control mode	Always on, solar lamp user defined
Communication	RS485 a través de RJ11, Bluetooth (opcional)
Protection	Input and output over voltage, low and high battery voltage protection, reverse polarity protection, high and low temperature protection, short circuit protection, PV over current protection.
Environmental operation temperature	-25°C - +55°C
Storage temperature	-25°C - +80°C
IP protection	IP32
Humidity operation	0% a 100%RH
Noise	≤10dB
Altitude	4000m
Terminal size	6AWG, 16mm ²
Breaker recommended	≥100A
Weight	2,5kg
Dimensions (H * W * D)	262,5 * 186,6 * 97,5mm
Grounding	common negative

Features

- Ultra-fast MPPT tracking speed with high efficiency ≥ 99.9%..
- Accurate MPPT tracking and recognition.
- Peak conversion efficiency of 98%.
- Auto limit function in current and temperature compensation.
- Integrated RS485 communication.
- Automatically reduces the power function when charging at high temperatures.
- Battery temperature compensation.
- High definition LCD display.
- PV, time or dual charge control mode.
- Protections: input and output over voltage, low and high battery voltage protection, polarity, battery high and low voltage, reverse polarity, high and low temperature, short circuit, temperature, short circuit, photovoltaic over current.