



* Image shown are just indicative



Rural Electrification



Street Light



Battery Charging



Sail Boat

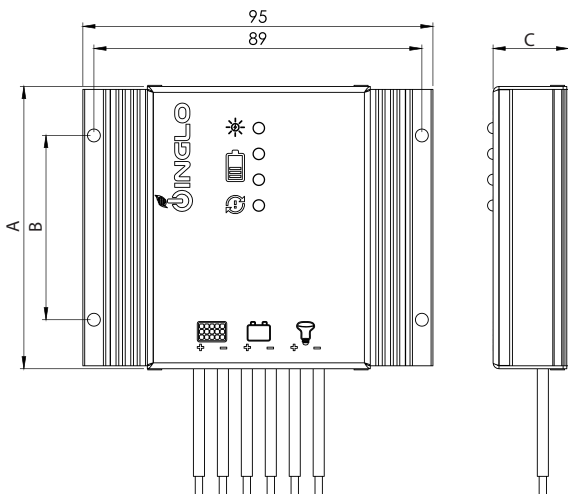


Freezer

Introduction

Inglo MPPT charge controller is designed for 12/24 V battery system. It comes with an outstanding feature battery charging algorithm, LED indication for state of charging, warning and protection functions, LCD Display (Optional). The use of MPPT technology can contribute to a considerable boost in energy output from PV modules (up to 30% more) compare to PWM technology. UART communication for remote monitoring is optional.

Dimension

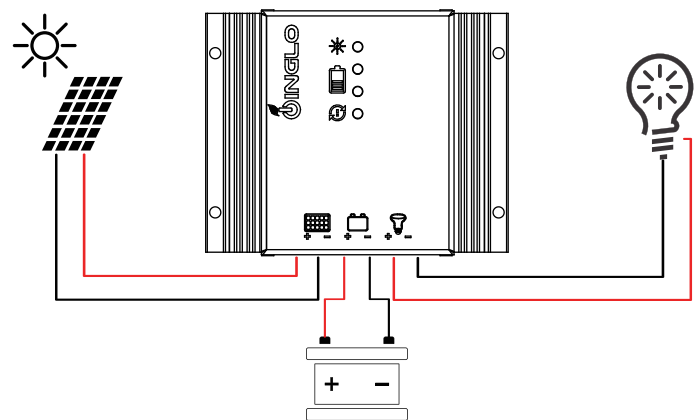


| Model | A | B | C |
|--------------|--------|--------|-------|
| Low Power | 82 mm | 60 mm | 27 mm |
| Medium Power | 137 mm | 120 mm | 27 mm |
| High Power | 137 mm | 120 mm | 35 mm |

Features

- Intelligent Lead Acid/Lithium battery charging technology.
- Up to 98% power conversion efficiency.
- Protected against Over Load, Short Circuit, Reverse Polarity connection of Solar Panel and Battery
- State of battery charging indicated by LED or LCD (optional)
- Inbuilt Bluetooth based remote monitoring (Optional)

Connection Diagram





Specification

| MODEL | IMC - 05 | IMC - 10 | IMC - 15 | IMC - 20 |
|-------------------------------|---|----------|----------|----------|
| Nominal Battery Voltage | 12V/24V | | | |
| Battery Type* | Lead Acid / Lithium | | | |
| PV Open Circuit Voltage | 36V @12V/ 50V @24V | | | |
| Vmp | 30V @12V/ 40V @24V | | | |
| Max. PV Short Circuit Current | 05A | 10A | 15A | 20A |
| Max PV Input Power(12V) | 75W | 150W | 200W | 260W |
| Max PV Input Power(24V) | 150W | 260W | 380W | 500W |
| Boost Voltage | 14.4V/ 28.8V @25°C | | | |
| Equalization Charging | 14.8V/29.6V @25°C | | | |
| Mains Charging | 14.4V/ 28.8V @25°C | | | |
| Float Voltage | 13.8V/27.6 V | | | |
| Low Voltage disconnect | 11.0V/22.0 V | | | |
| Reconnect Voltage | 12.8V/25.6V | | | |
| Over Voltage | 16V / 32V | | | |
| Output Voltage | 11.0~14.5V /22.0~29.0V | | | |
| Self Consumption | <20mA | | | |
| Peak Conversion efficiency | >96% (MPPT Tracking Efficiency 99%) | | | |
| Max Charging Current | 05A | 10A | 15A | 20A |
| Max Output Current | 05A | 10A | 15A | 20A |
| Radiating mode | Natural Cooling | | | |
| LED indication | System On, Charging, Load Short Circuit, Low Voltage Disconnect, Overload, Over Temperature | | | |
| Protections | PV Reverse Polarity, Battery Reverse Polarity, Overcharge, Low Voltage disconnect, Output Short Circuit, Overload | | | |
| Temperature Compensation | 16mV / °C | | | |
| Operating Temperature | 0 to 55°C | | | |
| Protection Category | IP22/68 | | | |
| Remote Monitoring (BLE) | Optional | | | |

Notes:

Can be customized with Dusk to Dawn(D2D) for lighting application.
Dimming is optional for lighting.

Remarks:

** Specifications are subject to change without notice.