## **Xantrex** SOLAR MPPT CHARGE CONTROLLER DATASHEET



AVAILABLE IN:

### ADVANCED POWER UPGRADE, MAXIMIZE DAILY ENERGY HARVEST

The Xantrex Solar MPPT Charge Controller 30 features advanced Maximum Power Point Tracking (MPPT) technology, providing an instant upgrade to your solar system with up to 30% more power compared to PWM charge controllers. Offering greater flexibility, simplicity, and efficiency in PV array designs, higher voltage PV arrays can be used up to 72V (nominal). Equipped with dual-battery bank charging ports ideal for simultaneously charging and maintaining 12V house and starter batteries, best-in-class PV array and battery protections, and a built-in LCD display providing real-time system data. Optional accessories include a remote battery temperature sensor and remote panel.



Advanced Maximum Power Point Tracking (MPPT) technology increasing daily energy harvest by 20-30% compared to PWM technology



Dual-battery bank charging to simultaneously charge house and starter batteries



Best-in-class PV array and battery protections



House battery types supported: Sealed (AGM), Gel, Flooded, Lithium Iron Phosphate(LiFePO<sub>4</sub>)

#### APPLICATIONS:





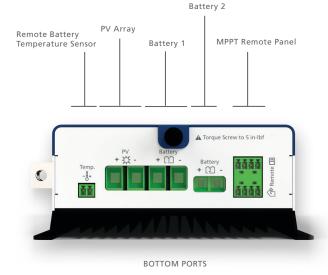












### **PRODUCT FEATURES**

- · Advanced multi-stage charging technology, Bulk, Absorption, Float, Equalization, for optimal battery charging
- Intuitive and easy-to-program
- MPPT charging algorithm with 99.5% efficiency
- DC/DC conversion with 98% efficiency
- Dual battery-bank charging ports, no need for trickle chargers
- Built-in LCD display PV Array (Volts, Amps, Watts, Watt-hours)
- Starter & House Battery (Volts, Temperature)
- House battery types supported: Sealed (AGM), Gel, Flooded, Lithium Iron Phosphate (LiFePO<sub>4</sub>)
- Best-in-class PV array and battery protections
- Naturally-cooled by convection
- Wide operating temperature range
- Optional remote battery temperature sensor (lead-acid batteries only)
- Optional remote panel

# 5.91" 165mm 2.64" 67mm 9.92" 251.9mm

### RECOMMENDED ACCESSORIES

PERFECT ADDITIONS TO YOUR CHARGE CONTROLLER



MPPT Remote Panel w/ 25' Cable (710-0010)

Provides real-time data about your solar system



REMOTE BATTERY TEMPERATURE SENSOR (708-0080)

Optimizes battery charging and battery life expectancy

### **ELECTRICAL DATA**

CHARGE CONTROLLER	30A
Part Number	710-3024-01
Nominal System Voltage	12/24V Auto-Detect
Rated Charge Current	Battery 1: 30A Battery 2: 1A
Battery Voltage Range	8 to 32V
Max. PV Open Circuit Voltage	100V
MPP Voltage Range	(Battery voltage + 2V) up to 72V
Max. PV Input Power	12V: 580W 24V: 1170W
Rated Charge Power	12V: 390W 24V: 780W
Battery Types Supported*	Battery 1 (House): Lead-acid battery (Sealed(AGM) / Gel / Flooded) Lithium Iron Phosphate (LiFePO₄) Battery 2 (Starter): Lead-acid battery (Sealed(AGM) / Gel / Flooded)
Self-consumption	12V: 17mA 24V: 10mA
Temperature Compensation Coefficient	-3mV/°C/2V
Grounding	Common negative

<sup>\*</sup>Battery 1 and Battery 2 can be different battery chemistries, but must be the same nominal voltage (12V or 24V)

### **ENVIRONMENTAL DATA**

CHARGE CONTROLLER	30A
Storage Temperature Range	-20°C to 70°C
Operating Temperature Range	-25°C to 45°C (fully-rated output)
Relative Humidity	≤95%, N.C.
Enclosure Protection	IP33

### **MECHANICAL DATA**

CHARGE CONTROLLER	30A
Dimensions	5.91" W X 9.92" H X 2.64" D (165.0mm W X 251.9 mm H x 67.0 mm D)
Net Weight	2.9 lbs / 1.3 kg
Max. Cable Size (PV Array and Battery 1)	0.63in² (16mm²) / 6AWG
Recommended Cable Size (PV Array and Battery 1)	0.24in² (6mm²) / 10AWG or higher
Max. Cable Size (Battery 2)	0.16in² (4mm²) / 12AWG
Recommended Cable Size (Battery 2)	0.04in² (1mm²) / 18AWG or higher