

DC/DC lithium battery charger 14.6V, 30A, 400W, IP68

Reference: WG-12C400L

EAN13: -

UPC: 85044090

Product attributes:

Product features:

Input voltage: 12-36 V DC
Output voltage: 14,6 V DC
Output current: 30 A
Output power: 400 W
Waterproof grade: IP68
Lifetime: 100,000 hours



Product description:

Product overview

WG-12C400L is a high-performance DC-DC charger specially designed for charging lithium iron phosphate (LiFePO₄) and lithium manganese (LiMn₂O₄) batteries. Thanks to a wide input voltage range of 10-36 VDC and a power of up to 400 W, it provides stable and efficient charging, especially in field applications where standard mains power is not available. Intelligent multi-stage charging in constant current (CC) mode until the target voltage of 14.6V is reached and the current is then automatically reduced to 10%, ensuring safe and gentle battery care, without the risk of overcharging or damage.

Areas of use:

- **Solar systems:** Charging auxiliary batteries in off-grid applications, island systems
- **Mobile applications:** Caravans, caravans, boats, mobile homes
- **Automotive industry:** Charging auxiliary batteries in trucks, buses
- **Electromobility:** Golf carts, electric bikes, small electric vehicles
- **Backup power sources:** UPS systems, emergency lighting, telecommunications equipment
- **Industry:** Handling equipment, measuring instruments, service vehicles
- **Outdoor activities:** Camping, expeditions, scientific expeditions

Key benefits:

- **High efficiency 96%:** Minimal energy losses and thermal loads
- **Compact design:** Space saving when installed in limited space
- **Wide temperature range:** Reliable operation from -40°C to +55°C
- **Rugged IP65 construction:** Dust and water protection for harsh environments
- **Natural cooling:** Quiet operation without fans, lower failure rate
- **Intelligent charging:** Optimized specifically for lithium batteries
- **Flexible connectivity:** Various connector types for easy integration
- **Long life:** MTBF 200,000 hours, 2-year warranty

Input parameters:

Input voltage: 12V, 24V DC (range 10-36V DC)
Maximum input voltage: 40V DC
Low voltage shutdown: 9.5V DC
Low voltage recovery: 10.5V DC
Maximum input current: 43A (at Vin=10.5V, Iout=30A)
Built-in fuse: 60A

Output parameters:

Output voltage: 14.6V DC $\pm 0.2V$
Output current: 30A $\pm 3\%$
Power: 400W
Efficiency: up to 96% (at Vin=12V DC)
Quiescent current: 110mA (at Vin=24V DC)
Battery leakage current: 2mA
Ripple and noise: 220-500mVp-p

Charging characteristics:

Charging mode: CC/CV (constant current/constant voltage)
Anti-backflow function: YES
Float charging: NO (optimal for lithium batteries)
Ignition wire (ACC): optional (10-36V DC ON, 0-8V DC OFF)
LED indication: RED (charging) / GREEN (fully charged)

Safety and reliability:

Protection against overload, overvoltage, overheating, short circuit (all with automatic recovery)

Anti-electric strength: $\geq 500V$ (input/output to body)

Insulation resistance: $\geq 10M\Omega$ (test voltage = 500V)

MTBF: $\geq 200,000$ hours

Construction and environment:

Aluminum construction with fins for natural cooling

Working temperature: $-40^{\circ}C \sim +55^{\circ}C$

Protection: IP65 (waterproof, dustproof, shockproof)

Size: 200×77×30mm (7.87×3.03×1.18 inches)

Weight: $\leq 1.1kg$

Connections and accessories:

Cabling: 45cm length @ 10AWG (input and output)

Available connectors: cables, alligator clips, Anderson Plug, M6/M8/M10 rings

Packaging: box

Certification and warranty:

Certificates: CE, RoHS, ISO9001-2015

Warranty: 2 years

