

Zivan NG1 Charger 48V 25A



Reference : ZIV-NG1-48V-25A

Brand : ZIVAN

Options :

No variants

3D Model : Available

EAN-13 : 3760123456789

The **ZIVAN NG1 CAN BUS 48V 25A charger** is an industrial high-frequency charger designed for **48 V** traction battery charging. It is a solid choice for projects searching for a **48V lithium battery charger** (subject to BMS compatibility and configuration) as well as for lead-acid batteries (depending on settings). Its **CAN BUS** connectivity enables integration into modern architectures where a **BMS** supervises or actively manages the charging process.

This product is supplied as the **charger unit only** (NG1). Batteries, BMS, vehicle/machine-specific harnesses, and operator interfaces are not included, allowing engineering teams full flexibility for **system sizing and integration** (battery choice, protections, cabling, HMI, safety chain, etc.).

Key benefits

- Professional solution rated **48 V / 25 A** for low-voltage traction applications.
- Suitable as a **48V lithium battery charger** when the BMS defines/validates the charging profile (configuration-dependent).
- **Isolated CAN BUS** interface with **CANopen** compatibility for BMS / master-system communication.
- **Programmable** charging curves and possible external control for advanced integration.
- High efficiency (> 85%) helps reduce losses and heat generation.
- Integrated safety functions: output short-circuit protection, reverse polarity protection, acoustic alarm.
- Internal logging up to **1000 charge cycles** (useful for maintenance/diagnostics).
- Compact form factor for fixed or onboard integration (environment/IP to be considered).

Technical specifications

Parameter	Value
Technology	High-frequency switched-mode charger controlled by microcontroller
Product type	Industrial charger with CAN BUS communication
Main operating range	48 V (traction use; lithium/lead-acid compatibility depends on configuration and BMS)
Kit nominal power	Not applicable (charger only)
Maximum power (indicative)	≈ 1.2 kW (indicative; depends on battery voltage and charging regime)
Controller max current	Not applicable
Main motor	Not applicable
Total kit mass	≈ 2.2 kg
Operating environment	-20 °C to +50 °C; forced-air cooling; IP20 (protected enclosure/area recommended)
Control interfaces / Connections	Isolated CAN BUS, CANopen compatible (communication with BMS/PC/master system)
Power cabling	To be sized by the integrator (current/lengths); verify crimping, routing, and protections
Protection and main disconnect	To be provided: upstream protection, accessible disconnect, safety chain (application-dependent)
Dimensions / Footprint	≈ 300 × 160 × 80 mm (indicative)
Compliance	CE (LVD / EMC) – final compliance depends on full system integration
Integration country	Italy (manufacturer)

Typical applications

- Light electric vehicles (industrial, utility, specialty).
- Material handling and low-voltage traction equipment.
- Aerial platforms, mobile machines, industrial carts.
- Industrial cleaning machines (scrubbers, sweepers).
- 48V electric marine applications (environment/ventilation/protection to be validated).
- Retrofit/conversion projects where the BMS lithium manages the charge via CAN.

Recommended integration

- Validate **battery chemistry** (e.g., LiFePO4) and the charging strategy defined by the BMS.
- Confirm **protocol compatibility** (CAN/CANopen) and expected frames (charge enable, current/voltage limits, etc.).
- Configure charging curves by trained personnel (lead-acid/lithium settings, safety thresholds, temperature compensation if used).
- Install the charger with adequate **airflow** (IP20: protected enclosure/area recommended).
- Size DC power cabling (cross-sections, crimping, labeling) and avoid unnecessary lengths.
- Implement protections: suitable fuses/breaker, contactor/main disconnect, and application-specific safety chain.
- Take EMC into account: routing, bonding/grounding, separation of power and control, shielding if required.

- Plan diagnostic access (maintenance, log reading, configuration/update if applicable).
- Document schematics, BOM, and configuration parameters for traceability.

Operating conditions

- Respect the allowed battery voltage range and BMS/configuration under/over-voltage thresholds.
- In hot environments, consider **thermal derating**: airflow and installation strongly impact performance.
- IP20: avoid dust/water/spray; use a protected location or a ventilated enclosure.
- Provide an **accessible disconnect** and emergency stop in line with the final application.
- Perform periodic checks: torque, heating points, cable/crimp condition, and air inlet cleanliness.
- Regulatory compliance (EMC, machinery, road/marine) depends on the complete integrated system.
- Configuration/diagnostic operations must be carried out by trained personnel.

Specifications are provided for technical guidance and may depend on configuration, battery type (lead-acid/lithium), BMS behavior, and integration conditions (cabling, airflow, environment). Final validation (performance, safety, compliance) remains the responsibility of the integrator.

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