



Lithium (LFP / NMC) Smart Battery Pack Chargers 48 V 35 Amp Model iDB4835L



iDB Power's 2KW Chargers are Smart SMPS type battery chargers optimized for charging Lithium (LFP/NMC) Battery Packs for E-Rickshaw / EV applications with **Three Stage** charging profile (CC – CV – with Charge Termination Timer and current threshold). These chargers have the provision for loading Communication Protocol. These chargers have the in-built flexibility of setting for DC current varying from 15 Amp to 35 Amps and voltage can be set from 48 to 65 Volts to enable charging of various battery configurations (15-Cell-Series up to 23-Cell-Series) of LFP or NMC battery packs.

Salient Features:

- Charging Current and Voltage profile optimized for Lithium Battery Packs (LFP & NMC) for E-Vehicles applications.
- **Smart, Settable** Charger with provision for Software Protocol,
- High Efficiency with Power Factor Correction to reduce Power Consumption from Mains..
- High charging current even at low mains voltages (as low as 110 v) for faster charging. Excellent Feature for Power deficient regions.
- Electronic Reverse Battery Protection – enhanced safety and avoid inconvenient fuse replacement in case of accidental reverse connection.
- Digital Display to indicate charging voltage, current, charging status, faults etc..
- Compact size for easy handling.
- Rugged metal enclosure

Specifications

CHARGING VOLTAGE	48V to 65V ± 0.5V (Voltage is set Based on Requirement.)
CHARGING CURRENT	15A - 35A ± 1A
CHARGING PROFILE	3-Stages : CC, CV, Charge Termination with Current Threshold & Timer.
AC OPREATING RANGE	120VAC±10V -280VAC±10V, 40 Hz TO 60 Hz
AC POWER FACTOR	Active PF correction, >0.95
EFFICIENCY	90% Typical at nominal input
LCD DISPLAY PARAMETERS	
SCREEN1 (a) Charger Bar Graph, Elapsed Time (b) Instantaneous Charging Current and Battery Voltage	
SCREEN2 (a) Selected Battery Type, Set CC Current, Set CV Voltage	
SCREEN3 (a) Mains Voltage and Frequency, Ambient Temperature (optional)	
LED INDICATIONS	
(a) Green – Charging On, (b) Yellow – Charging Stopped, (c) Red – Fault	
AUDIO INDICATIONS (Buzzer)	
a) Short Beeps - Power On, Charging Start or Stop	
b) Intermittent Beeps - Battery Charge Completion	
c) Long Beeps - Mains Failure or any Faults	
SAFETY PROTECTIONS	
A) REVERSE BATTERY PROTECTION - Electronically Protected – Charger will not start unless battery is connected in correct polarity.	
B) MAINS VOLTAGE PROTECTION - Withstand up to 320V AC RMS with Surge Protection.	
C) MAINS OVER CURRENT PROTECTION - By FUSE, in case of abnormal condition	
D) THERMAL PROTECTION-Electronically protected with internal temperature sensor.	
COOLING SYSTEM	Forced Air Cooled
OPERATING TEMPERAT.	0°C TO 45°C
Battery Cable	3mts 6sqmm with Anderson Type 50A Connector. 50A Terminal Block.
Mains Cable	1.8mts 1.5sqmm 3Core Cable with 16A molded Plug.
HUMIDITY	95% RH Non-Condensing
ENCLOSURE	Powder coated sheet metal cabinet
NET WEIGHT	6.0 kgs