



**Liveguard™**

**DRIVEN BY  
TECHNOLOGY  
POWERED BY  
INNOVATION**



# ABOUT LIVGUARD

Livguard boasts a legacy of 35-year with cutting-edge electromobility solutions. With five state-of-the-art manufacturing locations, we are India's fastest-growing Energy Transition company.

At Livguard, we understand that every step counts in your journey towards a sustainable future. That's why we proudly offer custom-built end-to-end products, solutions, and services tailored to your unique needs. Our 35+ company-owned service centers, 2000+ service hubs with a 24/7 hotline, and a 750+ trained field service force ensure that your electromobility solutions are always in top-notch condition.

Behind our success is a 200+ strong R&D team across every segment, tirelessly developing cutting-edge solutions for light-electromobility applications. Our quality-driven approach ensures that innovative products and solutions are delivered by experienced professionals, manufactured with automotive process excellence.

We don't just offer solutions; we build lasting partnerships. Join us on the journey towards a sustainable tomorrow, where our commitment to innovation and service is second to none.



# 3 WHEELER MOTOR



Motor Type	L3 Mid Motor for E-Rickshaw
NOMINAL VOLTAGE	48-72 V
PEAK TORQUE	25 Nm
PEAK POWER (S2 - 60 Sec)	2 kW
RATED POWER (S2 - 30 Min)	1.2 -1.5 kW
NO LOAD RPM	3200 - 3650 RPM

## FEATURES

**Indigenously  
Designed**

**High Torque Output,  
ensuring quick and  
smooth acceleration**

**Efficient design for  
range optimization  
and longer battery life**

**Highest  
mileage**

**Waterproof Robust  
construction for  
durability**

**Temperature  
Sensor for  
better protection**

**Balancing of the  
Rotor to eliminate  
mechanical failures**

**Best in  
class warranty**

# 3W CONTROLLER



TECHNICAL SPECIFICATIONS	
Rated Voltage	48V DC
Rated Current	55A +/- 2A
Maximum Input Power	3080W
MOSFETS	12 No's
Control Technique	Trapezoidal
Motor Feedback	Hall sensors
Braking System	Hard/Soft Brake (Regenerative Braking)
Battery Type	Lead acid
Motor Rating	13050W BLDC Mid Mount Motor
IP Grade	IP65
Rated Efficiency	>95%
Enclosure Material	Al. Alloy
Weight	1.95 kg Approx.
Dimensions (LXWXH) mm	(238x118x70) mm Approx.
Ambient Operating Temperature	0°C to +55°C
Storage Temperature	-10DegC to +55DegC

\*Specifications are subject to change without Prior notice due to constant improvement in design & technology

\*\*Efficiency, range & speed are based on test results conducted during R&D.

## FEATURES

Coasting Regen

Regenerative Braking

Temperature Protection

Over Voltage Protection

Under Voltage Protection

Hall Protection

# EV CHARGER



TECHNICAL SPECIFICATIONS		
MODEL NUMBER	Smart Charger - LA 4820i	Li Smart Charger - Li 4820i
AC Input Voltage Range	90VAC - 300VAC $\pm$ 10V (initially start within 105V to 290V)	90VAC - 300VAC $\pm$ 10V (initially start within 105V to 290V)
AC Input Voltage Nominal	230VAC AC	230VAC
Input Frequency	45Hz to 65Hz	45Hz to 65Hz
Input Current-Maximum	< 8.5 AMP RMS	< 8.5 AMP RMS
Inrush Current	0.9 (90V to 270VAC Input)	<50 Amps
DC Output Maximum DC Output Voltage	64V DC $\pm$ 1V DC	64V DC $\pm$ 1V DC
Output Voltage Nominal	48V DC	48V DC
Output Current	20A DC $\pm$ 1A	20A DC $\pm$ 1A
Peak Efficiency	90%	90%
Output line & Load Regulation	$\pm$ 2% at cable	$\pm$ 2% at cable
DC Ripple/Noise	<200mV (Peak-Peak)	<200mV (Peak-Peak)
Enclosure	CRCA Sheet Metal	CRCA Sheet Metal Cabinet
Cabinet Dimensions	(276 x 160 x 90) $\pm$ 0.5mm	(276 x 160 x 90) $\pm$ 0.5mm
Weight	3.1Kg	3.1Kg
AC input connector	1.5mtr 3Core with 3Pin AC pluggable connector 16A	1.5mtr 3Core with 3Pin AC pluggable connector 16A
DC Output Connector	Anderson Connector SB-50 With 2 core 1.5meter cable.	Anderson Connector SB-50 With 2 core 1.5meter cable.

\*Specifications are subject to change without Prior notice due to constant improvement in design & technology

\*\*Efficiency, range & speed are based on test results conducted during R&D.

## FEATURES

<b>Fast charging</b>	<b>Designed to meet Adverse power condition</b>	<b>Charging of deep discharge battery from 30V</b>	<b>Wide input operating Range 90V-300V</b>	<b>High Efficiency Consumes less power</b>
<b>Accurate Battery charging voltage</b>	<b>Battery Reverse Polarity Protection</b>	<b>Short circuit protection</b>	<b>Charger over Temperature shutdown</b>	<b>User friendly LED indicators</b>

# LEAD ACID E-RICKSHAW BATTERY



**MAXIMUM LIFE**

**MAXIMUM MILEAGE**

TECHNICAL SPECIFICATIONS		
Model	LG DO ERTU 2300	LG DO ERTU 2500
Capacity @C <sub>20</sub>	130	140
Dimensions (LxWxH) mm	410x175x275	410x175x275

## FEATURES

Rugged Container  
& Lid design

Vent plug with  
filter disc

Thicker Tubular  
positive plate

High Pressure  
Die-Cast Spine

NAM with Active Carbon  
Technology with Double  
side Pasting

Super Tuff Negative  
3D Grid Design

# DRIVEN BY AI

UNLEASHING THE FULL POTENTIAL OF BATTERIES  
USE LONGER, BE SAFER, CHARGE FASTER

## ADVANCED BATTERY INTELLIGENCE



## REALTIME ACTIONABLE INSIGHTS

