

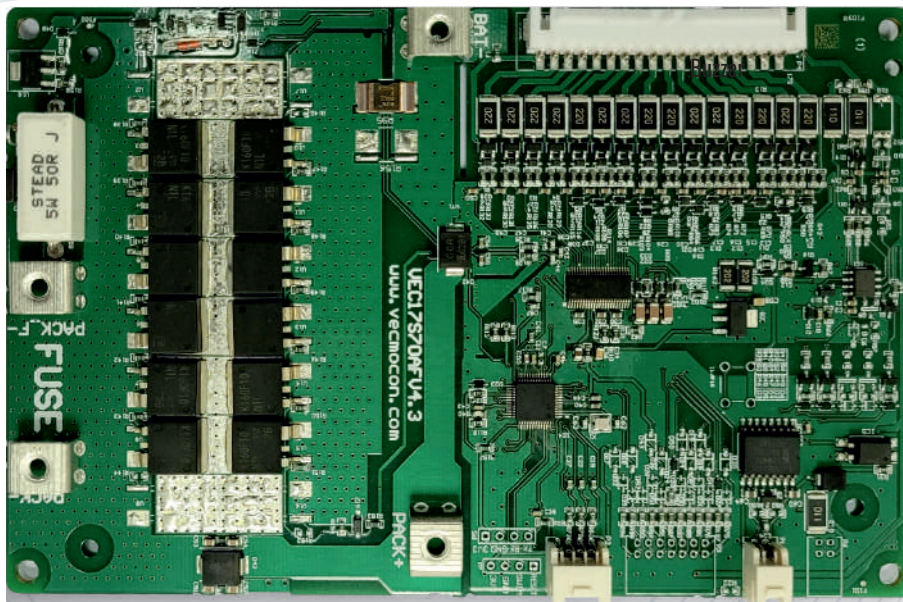


# VECMOCON

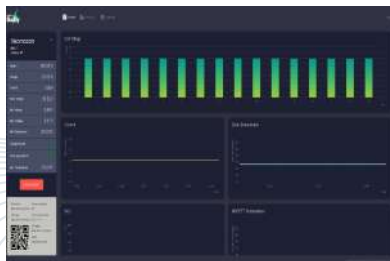
TECHNOLOGIES

## Battery Management System

Fully compliant with AIS 156 guidelines



AV board for AIS 156 phase 2



BATTERY BUDDY™

### Cloud Tools



Configuration Tool

## DRIVEN BY INTELLIGENCE



**i-VEC**<sup>®</sup>  
DRIVE



## Description

Fully compliant with **AIS 156** to strengthen the safety parameters of the battery pack.

## Features

- Intelligent battery management system with state of the art ML based algorithms
- Supports all lithium-ion chemistries
- Isolated CAN communication with SAE J1939 protocol
- Active GPS + 4G enabled IoT gateway available
- Fully configurable 21 parameters (cutoff limits, release limits as well as release times, and more) over a web based configuration tool
- Fully analog front end
- Onboard pre-charging function for up to 20,000  $\mu$ F capacitive load.
- 4 redundant temperature sensors for the battery pack and 3 temperature sensors on board.
- Remote diagnostic capabilities which comes with on field diagnostic BATTERY BUDDY™ tool.
- State of the art SOC estimation using Vecmocon's proprietary "Dynamic state charge" algorithm.

## Applications



MOTORCYCLES



SCOOTERS



THREE WHEELERS



BACKUP SYSTEMS



ENERGY STORAGE SYSTEMS

## Technical Specifications

Parameter	Comment	Min	Typical	Max	Units
Battery Voltage	Upto 24 Cells in series		48/60/72		V
BMS Supply Current (Continuous)	Normal Mode	18	20	25	mA
BMS Supply Current (Sleep)	Sleep Mode		2		uA
Cell Voltage Measurement Range	Pre-channel	2.0		5.0	V
Cell Voltage Measurement Accuracy			$\pm 15$		mV
Discharge Current (Continuous)			60		A
Discharge Current (Peak)	For 10 seconds		90		A
Charge Current (Continuous)			60		A
Charge Current (Peak)	For 10 seconds		90		A
Balance Current		180	200	210	mA
Series Configuration	13-24 S (Hardware configurable)				Series
Operating Temperature	In battery with cover	-40		90	°C
Dimensions	13-16 cells in series		(105mm x 160mm x 18mm)		mm
	18-24 cells in series		(105mm x 190mm x 18mm)		mm