KeBMS-710

Ketter-Control System

INTRODUCTION

The KeMB was born based on high quality aeronautical technology and it was evolved to the energy storage technology and high voltage batteries for industrial and energy sectors application. Our product has been tested in actual aeronautical ambient conditions and designed with a high reliability and very strict aeronautical requirements.

It is one of the latest generation technologies, with high reliability, reduced weight and size and integrated battery and KeMB monitoring and protection logics.is an exceptionally flexible and cost-effective Battery Management System.

The system consists of a Ketter-Control master board (KeMB) communicating with up to 84 slave monitoring boards (KeSMB). Each KeSMB manages 12/15/18 cells in series and 8 temperature sensors. The KeMB handles pack level measurements, data logging, application and charger interfaces.
The company has its own PC Diagnostic Software, provides an intuitive suite of system configuration tools as well as displays for monitoring battery and BMS performance. It allows to set battery parameters such as limit voltages and temperatures, allow able charge and discharge rates or improve SoC estimation with your own battery model. This monitoring system can be used as real time monitoring system or maintenance purposes.

The software allows to configure the following parameters of the BMS. cells chemistry, discharge curves, temperature sensors, maximum discharge current, overtempt warning, overvoltage limit, undervoltage limit, etc.

FLEXIBILITY

6 VDC to 1000 VDC
Up to 480 cells in series
All battery parameters easily configured
User-definable event responses and warnings User configurable
I/Os & CAN messages Battery model for intelligent rate control

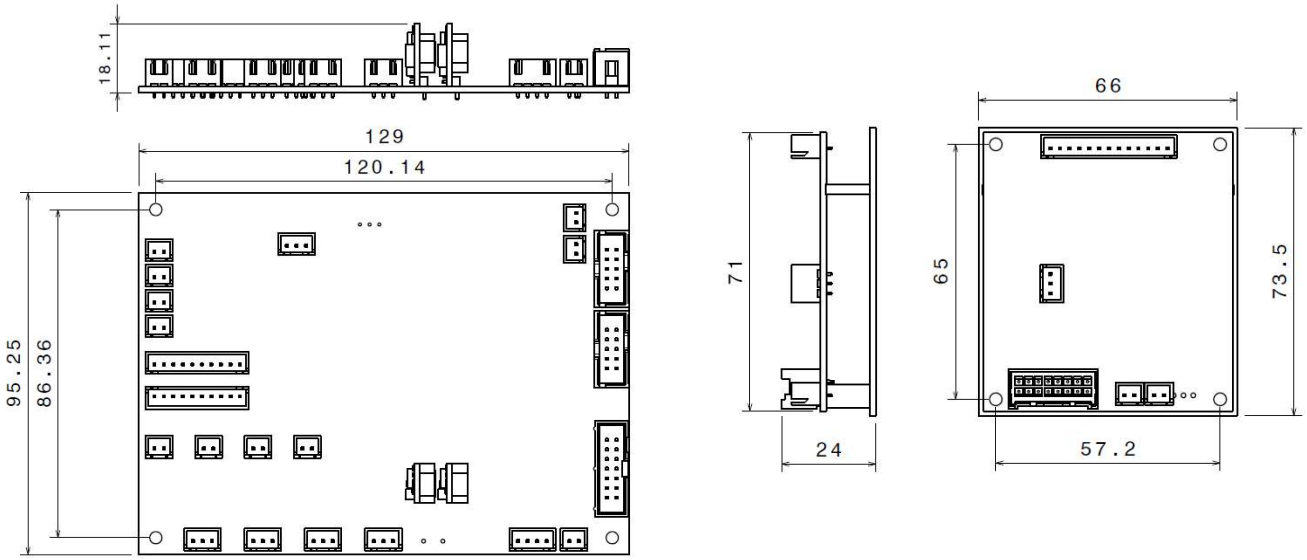
SAFETY

Detection of 31 error modes and 8 warning conditions
Noise and vibration robust
-40° to +85°C operational range

FUNCTIONALITY

Modular: up to 84 modules of 12 cells in two separate ports
Cell voltages 0-5V, ±1.6mV accuracy
SOC and SOH: 100% programmable estimation
Isolation fault detection
Cell balancing up to 230mA/cell
Thermal management
Advanced charger
Control Data logging

Applications



PARAMETERS

System Voltage Range	6 - 1000VDC
Cells per KeSMB	8 - 18 Cells
Cells per System	8 - 480 Cells in series
Capacity	4000Ah Max
Balancing Current	230mA @ 4.2VDC Max
Current Consumption KeSMB	<10mA operating. KESMB is powered from cells / <4µA sleep mode
Temperature Sensor Temperature Sensors per KeSMB	1 on KeSMB PCB and 8 for Battery pack monitoring NTC, 100KΩ @ 25 DegC, β Value: any value
Measurement Specifications	Cell voltage: Range 0-5V, Accuracy ±1,6mV typical, Sampling 26Hz to 7kHz Temperature accuracy ±1C (dependent on sensor)
Dimensions	129 x 95 mm
Coating	3M™ Novec™ electronic coating EGC-1700
Protection Modes	Capable to monitor and handle 31 safety critical error modes Capability to broadcast system status, errors, and warnings over CAN and RS485
Diagnostic Tool	Supported operating systems: Windows Professional, XP, Vista, 7, 8.1 and 10 Service version - field service & troubleshooting Requires USB to RS485 converter cable device
EMC Immunity	Tested
Temperature	Specifications: Operational -40° to 85°C

Dimensions in MM

KETTER BATTERIES

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