

# Vinci-HV BMS for high-voltage grid-tied batteries and arrays

Complete Battery Management System for 500~1600 V Li-ion batteries.
Outstanding versatility, feature rich.

#### **Standard specifications:**

- 500 to 1600 V bus
- Up to 62000 Li-ion cells, 3.2 or 3.7 V chemistry
- Master / slave, distributed topology
- Redundant, dual BMS framework for reliability
- Fiber optic links to slaves, for isolation
- Up to 63 banks, in series, parallel or both
- Up to 24 cells in series per bank
- Rugged, sealed, industrial grade packaging
- Contactor or latching relay driver, precharge
- Thermal management: 1 sensor / cell
- Hall Effect current sensing
- Energy (top balance, 100 % SoC) power (mid balance, 50 % SoC), or both
- SoC, SoH, extensive fault check, data logging
- CAN communication link standard
- Monitoring and field configuration with GUI
- Off the shelf, stocked

#### Array:

- Up to 63 independent strings in parallel
- Safe connection to bus (no inrush)
- Managed as a single unit





#### **Applications**:

- Grid-tied battery or off grid
- Micro-grid
- Back-up
- Peak shaving
- Arbitrage
- Distributed resources

# Elithion's Vinci: the most advanced family of off-the-shelf BMS solutions

The Vinci family of BMS solutions is the culmination of Elithion's years of experience in Battery Management Systems.

Each Vinci BMS solution is carefully tailored to a given application, fulfilling its every need.

We wrote the book on Li-ion BMS... literally.



#### Elithion Inc.

Leading manufacturer of Lithium-ion Battery Management Systems (BMS) 5303 Spine Rd #102, Boulder CO, 80301 USA / 1-720-466-7006

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## **Options**

## **Current sensing:**

• Hall Effect sensor

#### **Communication links**:

- XanBus<sup>TM</sup>
- RS485 ModBus
- Ethernet ModBus
- RS232
- WiFi
- USB

## Pre-made wiring:

Control harness

### Adapters:

- USB
- RS485

## Example: Single series string

## **Example:**

Single series / parallel matrix

## **Example:**

Array of multiple strings in parallel



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