

Amphenol ICC

 **FCi Basics**

# Battery Management Systems



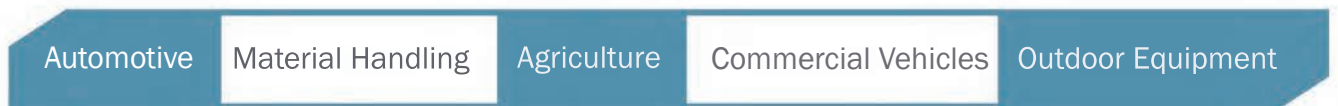
 **FCi Basics**

## Battery Management System

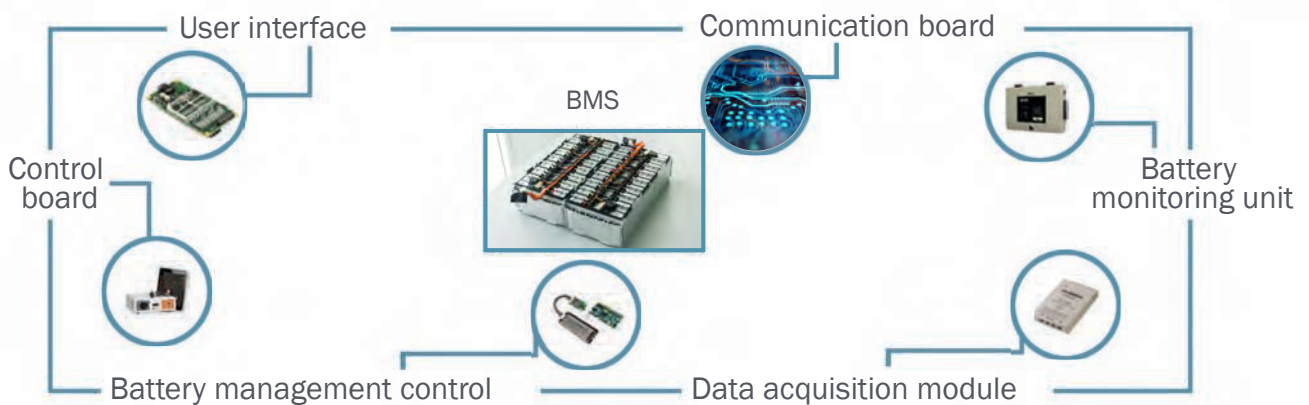
### An innovative application with even greater potential

The Battery Management Systems is an electronic system for the complete control of all the diagnostic and safety functions for the management and balancing of the electric charge. Therefore, this systems can be found wherever there is a need for efficient control and monitoring of a battery system. This means that applications vary from the Automotive market, Agriculture; Material Handling, Commercial Vehicles; Outdoor Equipment and Maintenance/Industrial.

FCi Basics recently developed new, compact connector systems that meet the BMS requirements for reduced package size, space consumption, weight and wire size. On top, they meet automotive standards like LV214 and USCAR.



## Applications and Products



## MicroSpace™ Versatile Wire to Board connector system

### Value Proposition

Minitek MicroSpace™1.27mm / product presentation

The MicroSpace™ compact design addresses the growing need for miniaturized components and is capable of reducing the PCB footprint by 50% due to increased signal density.

MicroSpace™ is available in 1.27 and 1.50 mm pitch with surface-mount and pin-in-paste configuration in single and double row with top and side latch options.

MicroSpace™ with LV214 Severity-2 compatibility and MicroSpaceXS with USCAR compatibility makes this connector family especially suitable for automotive applications.

### Configurations

- ◆ Pitch: 1.27, 1.50,
- ◆ Positions :
  - ◆ Single row : from 2 to 15
  - ◆ SR Staggered : from 2 to 16
  - ◆ Double row : from 4 to 30
- ◆ Operating Temperature: -40°C to +130°C
- ◆ Current rating: 4A

### Features

- ◆ Terminal Positioning Assurance (TPA)
- ◆ Connector Positioning Assurance (CPA)
- ◆ Poka-yoke polarization

### Target Markets and Applications

- ◆ Automotive



## Multipitch® Secure internal Wire to Board range

### Value Proposition

Minitek® Multipitch / product presentation

Multipitch® compact design addresses the growing need for miniaturized components.

Multipitch® is available in 1.25, 1.50 mm pitch, with positions from 2 to 15 (single row) and 10 to 30 positions (double row).

Multipitch® is available in single and double row, vertical and right angle, surface-mount

Wire Gauge: 24-28AWG

### Configurations

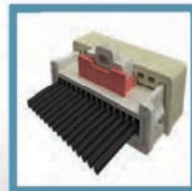
- ◆ Pitch: 1.25, 1.50mm
- ◆ Positions:
  - ◆ 1.25mm pitch: Single row : from 2 to 15;
  - ◆ Double row : from 10 to 30
  - ◆ 1.50mm pitch Single row : from 2 to 15
- ◆ Current rating: 2A

### Features

- ◆ Terminal Positioning Assurance (TPA)
- ◆ Connector Positioning Assurance (CPA)
- ◆ Hold down features
- ◆ Housing with positive locking

### Target Markets and Applications

- ◆ Automotive
- ◆ Industrial
- ◆ Consumer



## WireLock® More Reliability, Low Mating Force, Automotive Grade Connector System

### Value Proposition

WireLock® / product presentation

The WireLock® Wire-To-Board connector design addresses the growing need for automotive grade, compact interconnect.

Meets the needs of demanding applications for BMS in Automotive markets and is compliant to USCAR-2 and QC-T1067.1-2017

WireLock® is available in 1.80 mm pitch, with positions from 10 to 40 in double row, vertical and right angle, through hole and SMT type, top latch with CPA

Wire Gauge: 22-26AWG

### Configurations

- ◆ Pitch: 1.80mm
- ◆ Positions:
  - ◆ from 10 to 40
- ◆ Current rating: 3A

### Features

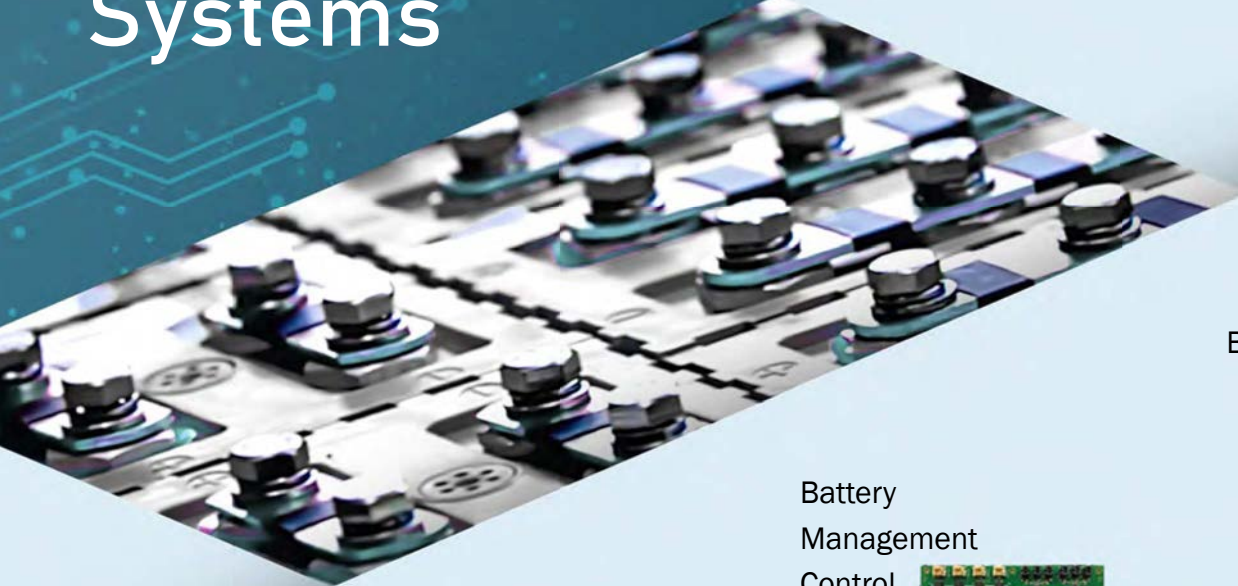
- ◆ Terminal Positioning Assurance (TPA)
- ◆ Connector Positioning Assurance (CPA)
- ◆ Four different coding with different colors

### Target Markets and Applications

- ◆ Automotive



# Battery Management Systems



BMS Control Board



Battery Management Control



MicroSpace™  
WireLock®  
MultiPitch®



Battery management monitoring unit



Battery Management System

