# IMMERSIO™ XM25

## Immersion-Cooled Battery System

The safest and most durable battery system ready to integrate with your mobility applications

### INDUSTRY CERTIFIED

- UN38.3 / ECE R100 / IEC 62619 Certified.
- BMS ISO 26262 / ECE R10 Compliance.
- Cycle life up to 3,000 times; ready for off-highway applications, on-road vehicles and energy storage systems.

### ACTIVE THERMAL RUNAWAY SUPPRESSION

- Immersion Cooling Technology to suppress thermal runaway.
- ASM and MSD for active safety protection and manual operating safety.

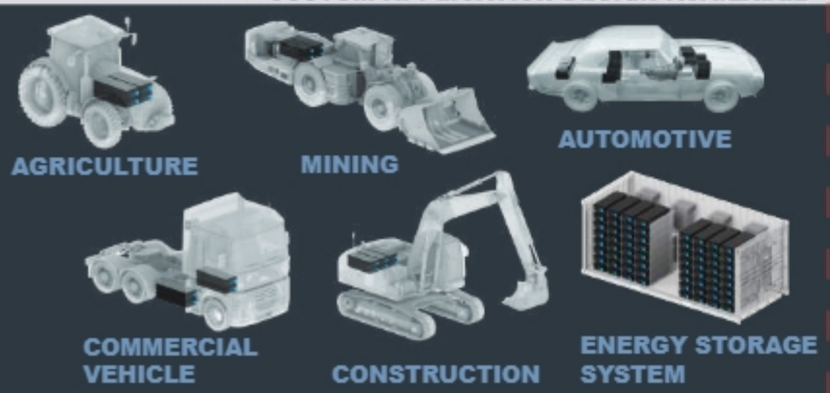
### OPTIMAL PERFORMANCE

- XING developed BMS with advanced thermal management.
- Scalable battery pack up to 800V and 31 strings (4S31P).
- High C-rate with wide operating temperature.

### READY TO DEPLOY

- Customizable & configurable CAN interface.
- Assembly & ship-out project control of certificated battery pack.
- Easy installation feature design.
- Intelligent OTA connected for data transmission & system upgrade.

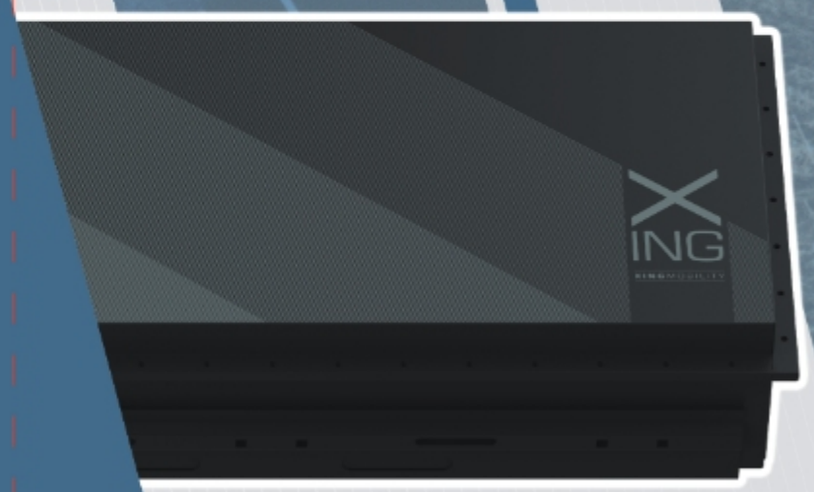
### CUSTOM APPLICATION DESIGN AVAILABLE




Custom application design available
xingmobility.com

Leave Request Now!

sales@xingmobility.com
+886-2-2795-1279
@xingmobility
XING Mobility



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## Immersion-Cooled Battery System

ENERGY STORAGE

XINGMOBILITY

# IMMERSIO™ XM25

The first COTS (Commercial-Off-The-Shelf) immersion-cooled battery system


Volume Production Ready

Up to 1C/1.67C Charge/Discharge (DoD 85%)

Active Thermal Runaway Suppression

High Volumetric Density Design

Up to 31 Strings Scalable Battery Pack

## XING BMS Highly Innovative BMS Solution

- Predictive SOC, SOH, SOI
- OTA Transmission
- Customisable CAN
- System Scalability
- Cloud Based Data Analytics
- Cell Balancing
- Thermal Management
- Real-Time Monitoring
- Automotive Grade

## Certification

| | |
|---|---|
| Transportation | UN38.3 |
| Performance Safety | ECE R100 / IEC 62619 |
| Isolation Resistance* | ISO 6469-1 |
| Automotive grade components* | ISO 26262 ASIL-C |

*Standard Compliance

**21700 NMC**
No fire propagation cells immersed in coolant

**MSD+HVIL** / Manual Service Disconnect
Manual safety protection while installation and maintenance

**OTA** / Over-the-Air Unit
Real Time Transmission

**ASM** / Active Safety Module
HV failure prevention for battery operating safety

**Enclosure**
ECE R100, IP67 verified, and compatible to ISO12944-2 C5

SYSTEM FEATURE

## DataSheet

| | | |
|---|---|---|
| Cell Type | | 21700 NMC |
| Cooling Method | | Immersion Cooling |

## Mechanical Data

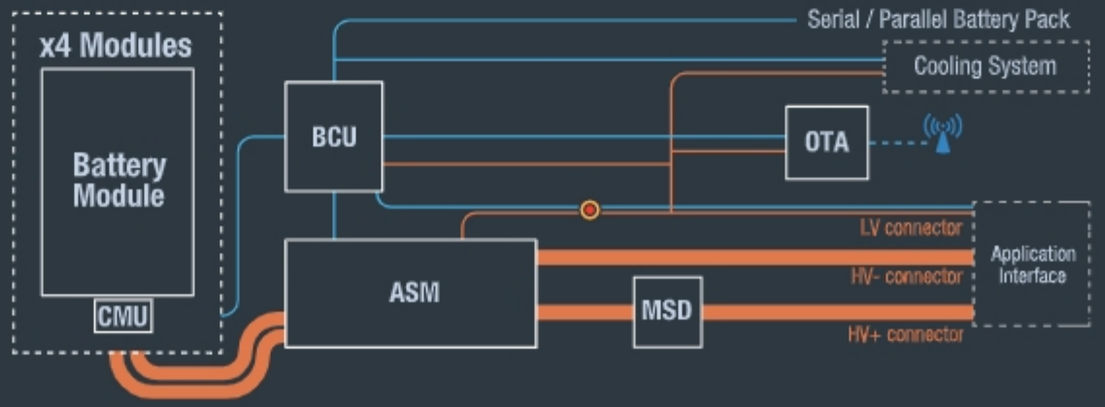
| | | |
|---|---|---|
| Dimension (L x W x H) | (mm) | 1238 x 477 x 229 |
| Weight | (kg) | 202 |
| Weight_dry* | (kg) | 186 |
| Operating temperature** | (°C) | -20 ~ 55 |
| Storage temperature | (°C) | -40 ~ 72 |
| Ingress Protection | | IP67 |

*Excluding coolant weight
**Temperature range could be expended with cooling system upgrade

## Electrical Data

| | | |
|---|---|---|
| Energy_nominal | (kWh) | 25.5 |
| Voltage_nominal | (V) | 177 |
| Voltage_max. | (V) | 200 |
| Voltage_min. | (V) | 135 |
| Peak Discharge current (10s)* | (A) | 840 |
| Continuous Discharge current | (A) | 250 |
| Peak Charge current | (A) | 225 |
| Continuous Charge current*** | (A) | 150 |
| Communication | | CAN 2.0B |
| Life Cycle** | | >3000 |

*Depending on SOC, temparature, and used cable
**Specifications varied for IEC 62619 compliance applications
***Depending on individual use profile, especially DoD, temperature and power
****The specified requirement for the Continuous Charge current of Energy Storage System (ESS) is 100A




SYSTEM BLOCK DIAGRAM

XING BMS battery system function parts diagram