

SPECIFICATION SHEET FOR BATTERY CELL SIMULATORS

So that we can provide you with the most accurate quote possible,
please answer the following questions about your technical requirements.

Company: _____ Department: _____

Address: _____ Postal code and city: _____

Country: _____

Technical contact

Name: _____ Email: _____ Phone: _____

Procurement contact

Name: _____ Email: _____ Phone: _____

Industry: EV manufacturer BMS manufacturer Chip producer Integrator Other: _____

Activity: Research Development Production / End-of-line (EOL)

1. Cell simulation/emulation

a) How many cells do you want to simulate? _____ cells

b) What balancing current is needed for active balancing?

As source: _____ A; As load: _____ A

c) Extras:

Coulomb measurement μ A measurement Fault simulation (disconnection, short circuit, reversed polarity)

Enhanced fault simulation (measuring leads to BMS)

d) Connection to test unit:

Cable set (open wire) Cable set + cascading box Break-out box (lower precision)

2. Temperature simulation

How many temperature channels do you want to simulate? _____ channels

Optional fault simulation (short circuit, cable break)

3. Insulation resistance

Emulation of insulation resistance for _____ channels

4. BMS current measurement

Shunt emulation (-150 mV to +150 mV)

Current sensor emulation (-6 V to +6 V)

Real current sensor; required current: _____ A

5. Housing

Rack system

Tabletop system

Integration in customer's rack/tabletop system

Comments: _____

Continue on other side.



6. Power supply (test bench)

a) Voltage/current available in lab:

Supply voltage: _____ V

Current: _____ A

1-phase

3-phase

with N

Other: _____

b) Emergency stop switch

Yes No

c) Insulation monitoring

Yes No

7. Control and communication software

a) Software in use:

PEAK PCAN

Vector CANoe

NI LabVIEW

MATLAB tool

dSpace ControlDesk

Other: _____

b) Will you need a starter project?

for PEAK PCAN

for Vector CANoe

for NI LabVIEW

for other MATLAB tools

for the following software: _____

c) Additional interfaces (CAN is included as standard):

EtherCAT

Other: _____

8. Integrated test bench

Is an integrated test bench planned?

Yes, with EVCC

No

Yes, other: _____

9. Project information

a) When is the project scheduled to start? _____

b) What is your project budget? €//\$

< 50,000

50,000 to 100,000

100,000 to 200,000

> 200,000

c) Is there a requirements specification? (If yes, please specify.)

Yes

No

e) Is a third party or end customer involved in this project?

Yes

No

If yes, who is the third party or end customer? _____

10. Is an expansion planned in the future?

Yes, see the system design. Ultimately _____ cells are planned.

No

11. Other requirements

