

CELL SIMULATION MODULE

6 Channel CS 31-1-6



OVERVIEW

The Cells Simulation Board is a battery simulator board used to simulate battery features. This board contains 6 isolated cells that can be controlled or adjusted by software via CAN ISO 11898-2, Ethernet TCP and USB-C. A single board can be used or several in series according to the requirements (based on how many cells are needed).

The voltage of each cell can be controlled with the software, also the voltage and current for each cell can be measured with the software.

KEY FEATURES

- 6 independent cells in total.
- Extendable number of cells by adding more boards.
- Each cell has adjusted output voltage (0-7V) and resolution of 1mV.
- The current sourcing of each cell is in the range 0-1A.
- Integrated Voltage and current measurements.
- Instant or average measurement.
- Controllable by CAN ISO 11898-2, Ethernet TCP and USB-C.

DIMENSION

L*W*H = 257mm*190mm*23.5mm

L*W*H = 264.38mm*190mm*23.5mm

(with connector)

OPERATING TEMPERATURE

-20 °C ~ +60 °C

POWER REQUIREMENT

DC Power Supply: 24 VDC, 1 A

Working Voltage Range: 9 V – 36 V (Default 24 V)

DETAILED SPECIFICATIONS:

Cell Voltage Output	Value	Unit
Range	0 to 7	V
Stability Precision	500	μ V
Setting Precision	500	μ V
Isolation Voltage	1500, Tested for 1 minute and 1mA max	V

Cell Discharge Current	Value	Unit
Range	0 to 1	A

Cell Charge Current	Value	Unit
Range	500	mA

Cell Voltage Measurement	Value	Unit
Range	-7 to 7	V
Resolution	16	bit
Precision	400	μ V

Low Cell Current Measurement	Value	Unit
Range	-1 to 1	mA
Resolution	16	bit
Precision	10	μ A

High Cell Current Measurement	Value	Unit
Range	-1000 to 1000	mA
Resolution	16	bit
Precision	1	mA

USAGE EXAMPLES

Mainly used to simulate battery's features (various voltage, charge, discharge, etc); For example: If you need to test your BMS (battery management system), battery pack is a must, so you can use the Cells Simulation Board to simulate real battery pack to finish your test.



ENVIRONMENTAL

The Cells Simulation Board is intended for indoor use only but may be used outdoors if installed in a suitable enclosure. Refer to the manual for more information about meeting these specifications.

Operating temperature

-40°C--+55°C

Storage temperature

-40°C--+85°C

Ingress protection (IP code)

None

Operating humidity

10-90% RH non condensing

Storage humidity

5-95% RH non condensing

SUPPORT AND SERVICES

Calibration

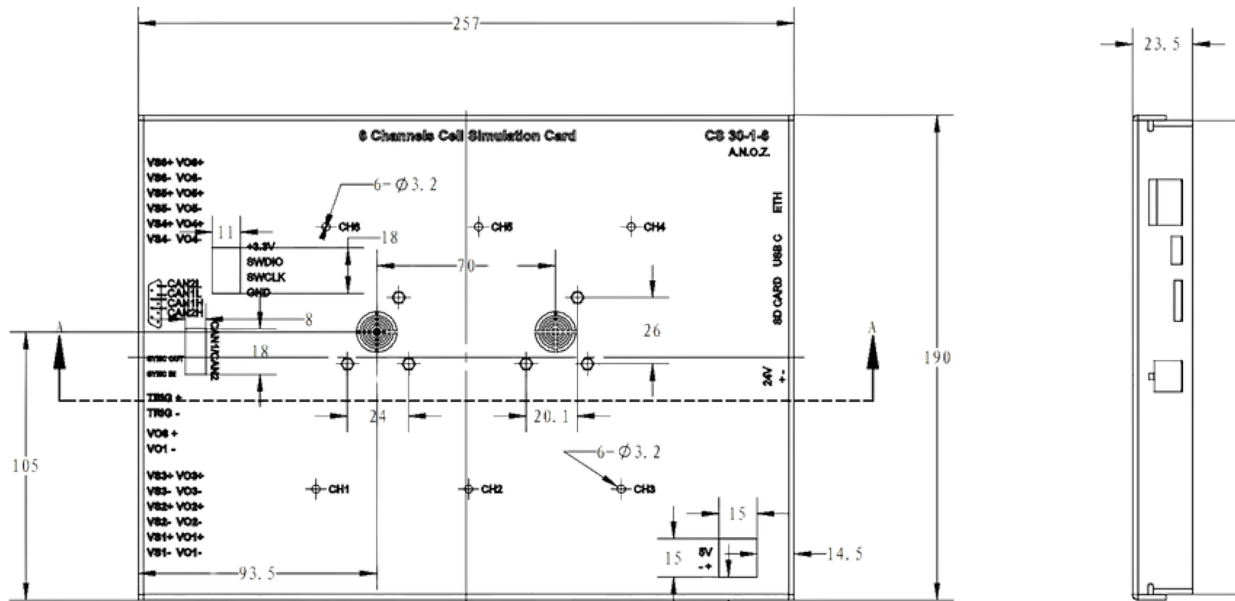
ART logics measurement hardware is calibrated to ensure measurement accuracy and verify that the

device meets its published specifications. To ensure the ongoing accuracy of the measurement hardware, ART logics offers basic or detailed recalibration service.

DIMENSION

L*W*H = 257mm*190mm*23.5mm

L*W*H = 264.38mm*190mm*23.5mm (with connector)



ART Logics (Shanghai) Testing Equipment CO., Ltd

艾驰电子检测设备技术（上海）有限公司

Tel: 021-61075469

Room 105, No. 258, Chengjiaqiao Road, Shanghai, P.R. China



www.art-logics.com
support@art-logics.com