

Certificate of Compliance

Certificate: 80075844 Master Contract: 274187

Project: 80075844 **Date Issued:** 2022-01-13

Issued To: Pylon Technologies Co., Ltd.

No. 73, Lane 887, Zu Chongzhi Road,

Zhangjiang Hi-Tech Park,

Pudong District, Shanghai, 201203

China

Attention: Min Xu

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Issued by: Peng (Cheney) Chen

Peng (Cheney) Chen



PRODUCTS

CLASS - C370182 - BATTERY SYSTEM FOR USE IN STATIONARY APPLICATIONS Certified to US Standards

CLASS - C370112 - BATTERY SYSTEM for use in Stationary Applications

Rechargeable Lithium ion Battery for use in stationary application, Model US5000 and US5000-B.

Electrical Ratings:



Certificate: 80075844

Project: 80075844

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	Battery Pack Ratings					
Battery Pack Model	Normal Voltage, Vdc	Normal Capacity, Ah/Wh	Battery Pack Configuration*	Enclosure IP Rating	Battery Module	BMS Model
US5000, US5000-B	48	100Ah/4800Wh	15S	IP20		MMCB_U1 50

Model difference: US5000-B is identical to US5000, expect that US5000-B has the additional circuit breaker and busbar.

Manufacturer's Specified Charging Parameters for Battery Pack

Battery Pack Model	Temperature Range, °C	Normal Charging Voltage, Vdc	Normal Charging Current, A	Maximum Charging Voltage, Vdc	Maximum Charging Current, A
US5000, US5000-B	-10~55	53.5	50	54	25 (-10~0 °C) 100 (0~45 °C) 50 (45~50 °C) 25 (50~55 °C)

Manufacturer's Specified Discharging Parameters for Battery Pack:

Battery Pack Model	Temperature Range, °C	Normal Discharging Current, A	End-of- discharge voltage, Vdc	Maximum Discharging Power, W	Maximum Discharging Current, A
US5000, US5000-B	-10~55	50	40.5		25 (-10~0 °C) 100 (0~45 °C) 50 (45~50 °C) 25 (50~55 °C)

Conditions of Acceptability:

- 1. The battery pack including its battery management system has been tested according to the functional-safety requirements of ANSI/CAN/UL-1973:2018, Second Edition. Solid state circuits and software controls relied upon as the primary safety protection, have been evaluated to the Standard for Safety: Automatic Electrical Controls Part 1, CSA/UL 60730-1. Any change to the software and electronic controls of the BMS may require additional testing.
- 2. The enclosure was evaluated only to establish an IP rating of IP20 with the Standard for Degrees of Protection Provided by Enclosure (IP Code) IEC 60529.
- 3. Product is evaluated for indoor use and shall avoid being used in moisture environment, and not being used near marine environments.
- 4. Further evaluation for Resistance of Moisture and/or Salt Fog shall be required for the battery pack intended to be used in the end product where moisture and/or salt fog condition were applied.



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- 5. For US5000, manual disconnect device shall be required during the installation of the end products.
- 6. Corrosion due to electrochemical action is to be determined for conductive parts in contact with terminals when subjecting to the installation of the end products.
- 7. Equipment Application Location: Stationary
- 8. Access Location: Operator Accessible.
- 9. The installation was not evaluated. The battery system shall be installed in accordance with NFPA 70 or other applicable installation code.
- 10. Dielectric Voltage Withstand Test was performed with the test potential of 1000Vac/1414 Vdc, a higher test potential shall be considered in the end product if higher overvoltage category specified.
- 11. Overvoltage Category(OVC): 2
- 12. Pollution Degree(PD): 2
- 13. Altitude for Operation: Up to 4000 m.

APPLICABLE REQUIREMENTS

ANSI/CAN/UL-1973:2018, Second Edition - Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications.

MARKINGS

See CSA report.

Notes:

Products certified under Class C370112, C370182 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80075844	2022-01-13	Original certification of Rechargeable Lithium ion Battery for use in stationary application, Models US5000, US5000-B. (cCSAus Mark) WMTC_ Initial Qualification Assessment to Dongguan BALUN Testing Technology Co., Ltd.