



*Fuel Gauge using Impedance Track™ technique and LED gauge display with gold plated bay charging pads.*

## PRODUCT SPECIFICATION

### FEATURES

Chemistry	Lithium-ion	Dimension	143mm(L) x 67mm(W) x 28.8mm(T)
Energy	33.0WH (nom. at 0.2C)	Pack Form Factor	2R2C
Voltage	16.8VDC (max), 14.4VDC (nom), 11.2VDC (min)	Cell Form Factor	18650
Current	5.0A (Charge/Discharge)	IP Protection	IP67
Operating Temperature	-20°C to 50°C (Discharging) 0°C to 45°C (Charging)	Drop Test	1.2m on 6 faces
Storage Temperature	-20°C to 50°C	Enclosure Material	ABS-PC Black Matt Finish UL94V-0
Connector Interface	Glenair™ 801-033-07NF6-7SA	Stacking	Non-slipped
Bay Charging Interface	6x gold plated charge pads	Keyway	Bay insert keyway control
Bay Charge Control	Inert contacts prior activation	Transportation Certificate	UN38.3, UN3840
Protection	Under-voltage, over-voltage, over-current, over-temperature	Safety Certifications	UL1642 Certified
Fuel Gauging Technology	Patent pending <i>Impedance Track™</i> technique	UL File No.	MH21015 for UL1642
Fuel Gauge Display	Relative capacity via 5-level LED indication	Model No.	MS-RB0334
SBS™-IF	SMBus 1.0, 1.1, Smart Battery System Compliant	Brand	<b>A+POWER</b>
Permanent Fault Display	Over-current permanent cut-off LED indicator	NSN No.	6140-32083-5431
Weight	310 ± 10 grams	Supported Wired Charger	<b>SCALABILITY MS-BC781</b> 10-Ports Smart Maintenance Charger

### About MILWORKS

MILWORKS® is a Product and System design & consultancy house for the Defence, Aerospace and Industrial markets. Its main business focus are Portable Energy Solutions, System Connectivity, and Tactical Communication System. We have in-house expertise in embedded electronics design, firmware & application coding, mechanical design and product ruggedization. Using PLM & ERP software, our business processes allow achieving full engineering focus to deliver high quality product and system solutions based on best engineering principles. MILWORKS® in-house design tools include SolidWorks™ MCAD & Professional Simulation, Mentor Graphics® Pads™ Logic/PCB ECAD tools and Hansware® Wire Harness Design Tool. Our long term partnerships with reliable contract manufacturers in Europe, USA, South Africa and Asia; MILWORKS® is committed to ensure our customer's interests are well taken care in the course of using our product and system solutions.

### Contact Information:

10 Ubi Crescent #03-14 Ubi Techpark Lobby B Singapore 408564

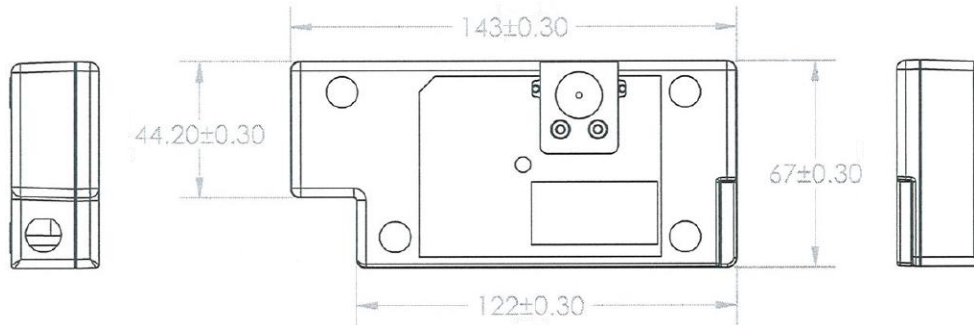
Tel: +65 6742 8196 Fax: +65 6742 8106 Email: [Sales@milworks.com.sg](mailto:Sales@milworks.com.sg) Website: [www.milworks.com.sg](http://www.milworks.com.sg)

All rights reserved. All material contents herein are the proprietary information of MILWORKS, and shall not be copied, reproduced, altered, reused, republished in any forms, or used for commercial gains through reverse engineering or clones without the written permissions of MILWORKS®. © 2011 MilWorks Solutions Pte. Ltd. and its associate MilWorks Embedded Products LL.P. MilWorks reserve to make changes to the product specification without notice. For any interest, kindly make prior confirmation with MilWorks in regards to the product specification.

## DESCRIPTIONS

The **MS-RB** series of smart lithium-ion battery packs are designed with latest standards on smart battery architecture. It is SBS-IF™ compliant with hermetically sealed enclosure for light weight rugged applications. Built-in three levels of safety protection design, UL1642 certified cells, patent pending Impedance Track™ technique, the **MS-RB** series of smart lithium-ion battery packs are comfortably adopted by security and military agencies to power its rugged outdoor devices. Its flat pack form factor snugly fits small pouches to power wearable computing devices. Forward looking feature include an inert side wall charging pads. This allows **MS-RB** series of smart lithium-ion batteries to be mass charged using 19" wide rack mount multi-bays smart battery charger. Fully configurable build, the **MS-RB** series allow wide configuration of battery cells to meet other power requirement.

## MECHANICAL DIMENSION



## FAMILY MODEL

**A+POWER** (Range of Smart Lithium-ion Battery Pack in 2R2C Form Factor)

Model No.	Form Factor	Build	Capacity (Ah)	Maximum Pack Voltage (V)	Max Discharge Current (A)	Max Charging Current (A)	Interface Connector	Gold Plated Contact Pads	Bay Charging	Bay Discharging	SMBus
MS-RB0334	2R2C	4S1P	2.6	16.8	5	1C	Glenair™ MM	•	•	X	•
MS-RB0332	2R2C	2S2P	5.2	8.4	5	1C	Glenair™ MM	•	•	X	•
MS-RB0331	2R2C	1S4P	10.4	4.2	5	1C	Glenair™ MM	•	•	X	•

# Option to have Glenair™ connector | ~ bay charging only | • Feature available | X Not Applicable

MilWorks reserves its rights to make amendment to the above specifications without prior notice. Technical specifications have to be verified prior any contracts.

Rel1.0.2012.MS-RB0334

## About MILWORKS

MILWORKS® is a Product and System design & consultancy house for the Defence, Aerospace and Industrial markets. Its main business focus are Portable Energy Solutions, System Connectivity, and Tactical Communication System. We have in-house expertise in embedded electronics design, firmware & application coding, mechanical design and product ruggedization. Using PLM & ERP software, our business processes allow achieving full engineering focus to deliver high quality product and system solutions based on best engineering principles. MILWORKS® in-house design tools include SolidWorks™ MCAD & Professional Simulation, Mentor Graphics® Pads™ Logic/PCB ECAD tools and Hansware® Wire Harness Design Tool. Our long term partnerships with reliable contract manufacturers in Europe, USA, South Africa and Asia; MILWORKS® is committed to ensure our customer's interests are well taken care in the course of using our product and system solutions.

### Contact Information:

10 Ubi Crescent #03-14 Ubi Techpark Lobby B Singapore 408564

Tel: +65 6742 8196 Fax: +65 6742 8106 Email: [Sales@milworks.com.sg](mailto:Sales@milworks.com.sg) Website: [www.milworks.com.sg](http://www.milworks.com.sg)

All rights reserved. All material contents herein are the proprietary information of MILWORKS, and shall not be copied, reproduced, altered, reused, republished in any forms, or used for commercial gains through reverse engineering or clones without the written permissions of MILWORKS®. © 2011 MilWorks Solutions Pte. Ltd. and its associate MilWorks Embedded Products LL.P. MilWorks reserve to make changes to the product specification without notice. For any interest, kindly make prior confirmation with MilWorks in regards to the product specification.