

Powermonitor II Lithium Battery

Catalog Number 1403-BA

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Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (Publication SGI-1.1 available from your local Rockwell Automation sales office or online at <http://literature.rockwellautomation.com>) describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.





In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

WARNING 	Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.
IMPORTANT	Identifies information that is critical for successful application and understanding of the product.
ATTENTION 	Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard and recognize the consequences.
SHOCK HAZARD 	Labels may be on or inside the equipment (for example, drive or motor) to alert people that dangerous voltage may be present.
BURN HAZARD 	Labels may be on or inside the equipment (for example, drive or motor) to alert people that surfaces may reach dangerous temperatures.

Before You Begin

Follow the information below to ensure lithium battery operation and reduce hazards to personnel. For more information on transporting, labeling, storing, and documentation, please see the Code of Federal Regulations, Title 49.

Handling

Follow these guidelines when handling the lithium battery.

- Use only for intended purpose.
- Do not transport, handle, package, or dispose of lithium batteries except according to the recommended procedures and local regulations. Do not incinerate or dispose of lithium batteries in general garbage collection.
- Do not cause short circuits.
- Do not heat above 100 °C (212 °F).
- Do not solder directly onto battery.
- Do not electrically recharge.
- Do not disassemble nor deform battery container.
- Do not mix with other types of batteries.
- Do not expose to liquids, especially water.
- Ensure correct polarity of battery upon installation.
- Do not short positive and negative terminals together.

ATTENTION

Risk of fire or burns. Do not recharge, disassemble, heat above 100 °C (212 °F), or incinerate. Keep battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly. Never put batteries in mouth. If swallowed, contact your physician or local poison control center.

Storing of Undischarged Lithium Batteries

Store the lithium battery in a cool, dry environment, typically 20...25 °C (68...77 °F) and between 40...60% relative humidity. Store the lithium batteries and a copy of the battery instruction sheet in the original container, away from flammable materials and liquids.

Transporting of Undischarged Lithium Batteries

Procedures for the transportation of lithium batteries within the United States are specified by the Department of Transportation (DOT) in the Code of Federal Regulations (CFR), Title 49, Transportation and the International Air Transport Association (IATA), Dangerous Goods Regulations. These regulations authorize transport of lithium batteries by motor vehicle, rail freight, cargo ship, and cargo-only aircraft providing certain conditions are met within the United States. Typical shipping configurations for the lithium battery include:

- Lithium batteries packaged singularly or in bulk - Transport of lithium batteries by motor vehicle, rail freight, cargo ship, and cargo-only aircraft is permissible within the United States. Refer to current regulations for packaging, marking, documentation, and weight limitations. Transport by passenger-carrying railcar or aircraft is prohibited.
- Lithium batteries installed in the Bulletin 1403 Master Module as part of a demonstration case - Regulations authorize transport of lithium batteries in equipment by motor vehicle, rail freight, cargo ship, and cargo-only aircraft providing certain conditions are met. Transport by passenger-carrying railcar or aircraft is prohibited.
- Lithium battery packaged with a new Bulletin 1403 Master Module - When shipping the single lithium battery with the Master Module, reuse the original Master Module container plus the lithium battery's carton and data sheet. Install the packaged lithium battery inside the Master Module container so as to prevent movement of the lithium battery and its carton. The container protecting the Master Module and packaged lithium battery is regarded as an overpack for the purposes of compliance with the labelling and documentation requirements.

Regulations authorize transport of undischarged lithium batteries by motor vehicle, rail freight, cargo ship, and cargo-only aircraft providing certain conditions are met. Transport by passenger-carrying railcar or aircraft is prohibited. Transport by passenger-carrying railcar or aircraft is prohibited. This lithium battery is neither safety vented nor hermetically sealed.

Prior to transporting lithium batteries into foreign countries and trading blocks, consult local regulations for the appropriate procedures for handling, storing, transporting, packaging, labeling, documentation, and disposing of the undischarged or discharged lithium batteries, catalog number 1403-BA.

Disposal of Discharged Lithium Batteries

In the United States, transportation of depleted lithium batteries for disposal is controlled by Code of Federal Regulations, Title 49. Depleted lithium batteries are defined as the extent that the open circuit voltage is less than the lower of:

- 2.0 volts or
- Two-thirds of the voltage of undischarged battery

Check the Code Federal Regulations, Title 49 or local regulations regarding the current methods and procedures for the disposal of lithium batteries.

ATTENTION



Do not incinerate or dispose of lithium batteries in general garbage collection. Explosion or violent rupture is possible. Lithium batteries should be collected for disposal in a manner to prevent against short circuiting, crushing, or destruction of the case integrity and laser seal.

Dispose of used batteries promptly.



At the end of its life, the battery contained in this product should be collected separately from any unsorted municipal waste.

Documentation

Consult the Code of Federal Regulations, Title 49, IATA Dangerous Good Regulations or local regulations regarding the current methods and procedures for correct documentation to accompany undischarged or discharged lithium batteries for transport.

Labeling

Check the Code of Federal Regulations, Title 49, IATA Dangerous Goods Regulations or local regulations regarding the current methods and procedures for the correct labeling of containers used in packaging undischarged or discharged lithium batteries for transport.

Install or Replace the Lithium Battery

Follow these steps to remove and install the lithium battery in a Bulletin 1403 Master Module.

ATTENTION



This procedure may be conducted with full electrical power applied to the Master Module. Use extreme caution when installing the lithium battery into your Bulletin 1403 Master Module. Failure to use extreme caution can lead to personal injury or death, property damage, or economic loss.

ATTENTION



When installing or removing the battery within the Bulletin 1403 Master Module, take care not to come into contact with metallic surfaces if power is applied.

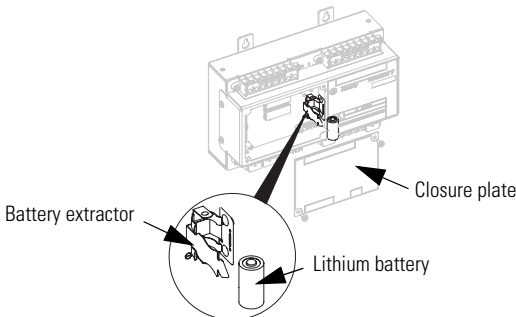
TIP

For proper operation, the device should not be powered for an extended period of time without a battery installed.

1. Remove the closure plate on the top face of the Master Module.

Electrical power is normally connected to the Master Module.

2. Gently pull the retaining tab of the battery extractor from its slot, then unfold and extend the battery extractor upward or away from the Master Module to completely expose the battery in its holder.



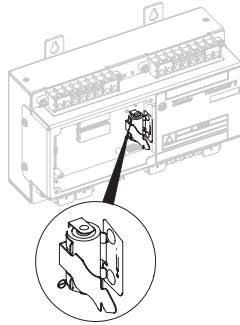
ATTENTION



Perchlorate material; special handling may apply.

See <http://dtsc.ca.gov/HazardousWaste/perchlorate/>

3. Gently pull upwards on the battery extractor tab to remove the battery from its holder.

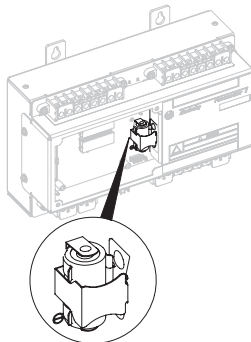
**ATTENTION**

The battery is held under pressure within its holder and may be forcefully ejected upon extraction.

4. Install the lithium battery noting the correct polarity within the battery holder.

Note that the battery must be installed over top of the battery extractor flap. The lithium battery should be held securely in place within the battery holder.

5. Refold the battery extractor over top of the lithium battery and insert the retaining tab back into the slot.



6. Reinstall the closure plate on the top face of the Master Module.
7. Send a command to reset the real time clock and clear the battery usage counter using the Display Module or the Communication Card.

ATTENTION

Risk of fire or burns. Do not recharge, disassemble, heat above 100 °C (212 °F), or incinerate. Keep battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly. Never put batteries in mouth. If swallowed, contact your physician or local poison control center.

ATTENTION

Replace battery with Allen-Bradley Cat. No. 1403-BA only. Use of another battery may present risk of fire or explosion.

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