

# ALBÉR UNIVERSAL XPLORER CELL TEMPERATURE (UXCT) BATTERY MONITOR



## FEATURES

The UXCT Battery Monitor includes the following features:

- Continual real time scanning of the following parameters:
  - Individual Cell Temperature
  - Ambient temperatures (on standalone models)
- Form C contact for parameter and thermal runaway
- Isolated RS-485 interface for UXBM-50 and UXIM battery monitor integration
- Compact 1U, 19" enclosure
- USB connectivity for PC to allow real time data viewing, configuration and data extraction
- Local status indicators and alarm reset
- Maintenance override - global disable of all alarms



The Universal Xplorer Cell Temperature (UXCT) system permits monitoring of individual cell and ambient temperatures for thermal runaway detection.

### Product Description

The UXCT module can be integrated with Alber series battery monitors or as a standalone system to assist with compliance to International Fire Code (IFC) 608.3.

When integrating to existing Alber products, it will connect to a host module via an RS-485 port for Battery Diagnostic System Universal (BDSU), or Universal Xplorer Industrial Monitor (UXIM) battery monitoring systems.

No matter what battery configuration model you have, with the UXCT, all your temperature parameters are measured and constantly monitored against user defined thresholds using Albers battery monitoring software. For details on installing and maintaining the UXCT, refer the UXCT Installation Guide.

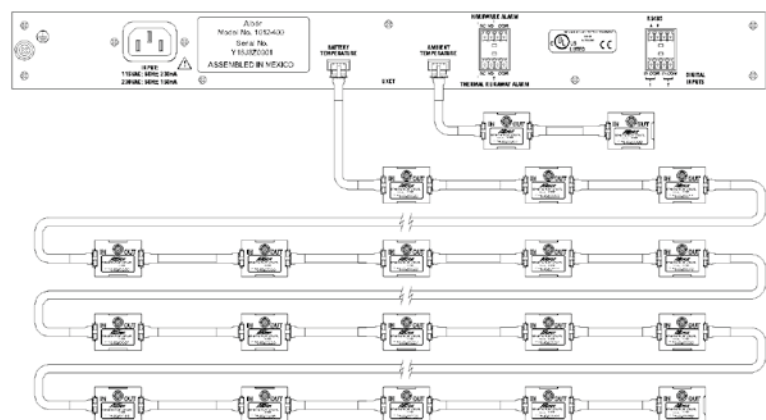
### Measurement Capabilities

The UXCT battery monitor includes the following measurement capabilities.

- Maximum of 256 cell temperature measurements
- Maximum of 4 ambient temperature measurements (standalone configurations only)

### UXCT Panel Controls and Indicators

The front panel has a very intuitive design with a USB connection, LED indicators and a button for resetting alarms, discovering sensor connections, restarts unit and initiates firmware upgrades. The rear panel uses standard connectors to allow for easy connection of ground, power, temperature network communication, ambient temperature, alarms, communications, string selector and RS-485.



Standalone UXCT system connections for a single battery configuration

## UXCT System Specifications

### SAFETY APPROVALS

UL61010-1\*, EN61010-1\*, IEC61010-1\*

### EMC APPROVALS

EN61326-1, FCC part 15 class A

### OPERATING ENVIRONMENT

<b>Temperature Range</b>	0°C to 40°C (32°F to 104°F)
<b>Humidity Range</b>	0% to 80% RH (non-condensing) at 5°C to 31°C, 0% to 50% RH (non condensing) at 31°C to 40°C
<b>Use</b>	Indoor Use Only
<b>Pollution Degree</b>	2
<b>Altitude</b>	0 to 2000 meters above sea level

### CELL /SYSTEM MEASUREMENTS

Cell Temperature	0°C to 80°C±1.0°C (32°F to 176°F)
Ambient Temperature	0°C to 80°C±1.0°C (32°F to 176°F)

### ALARMS

2 - Form C relay contacts, 2A at 30VDC

### DIGITAL INPUT

Dry contact digital input

INPUT POWER	MODEL	APPLICATION
AC Power, 24VAC, 50/60Hz	1012-200	UXBM-50 Integrated
DC Power, 135VDC	1012-300	UXIM Integrated
DC Power, 135VDC	1012-600	Industrial Standalone
AC Power, 115VAC, 60Hz/230VAC, 50Hz IEC	1012-400	UPS Standalone
DC Power, 20-54VDC	1012-500	Telecom Standalone

### COMMUNICATIONS

RS-485, USB, Fiber optic for BDSU integration

### DIMENSIONS AND MOUNTING

Aggregator	Sensor
1U chassis 19"W x 1.75"H x 6.25"D / 2.0 lbs. Battery Cabinet Top or 19" Rack Mount	1.1"W x 0.9"D x 0.5"H Battery Post or Battery Case Mount

## Thermal Runaway Requirement

REQUIREMENT	NONRECOMBINANT BATTERIES		RECOMBINANT BATTERIES		OTHER
	Flooded Lead Acid Batteries	Flooded Nickel-Cadmium (Ni-Cd) Batteries	Valve Regulated Lead Acid (VRLA) Batteries	Lithium-ion Batteries	Lithium Metal Polymer
Thermal Runaway Management	Not required	Not required	Required (608.3)	Not required	Required (608.3)

608.3 Thermal runaway. VRLA and lithium metal polymer battery systems shall be provided with a listed device or other approved method to preclude, detect and control thermal runaway