

Traffic Cabinet Components and Accessories

ZX1000-36 & ZX2000-48 Super Capacitor Battery Modules

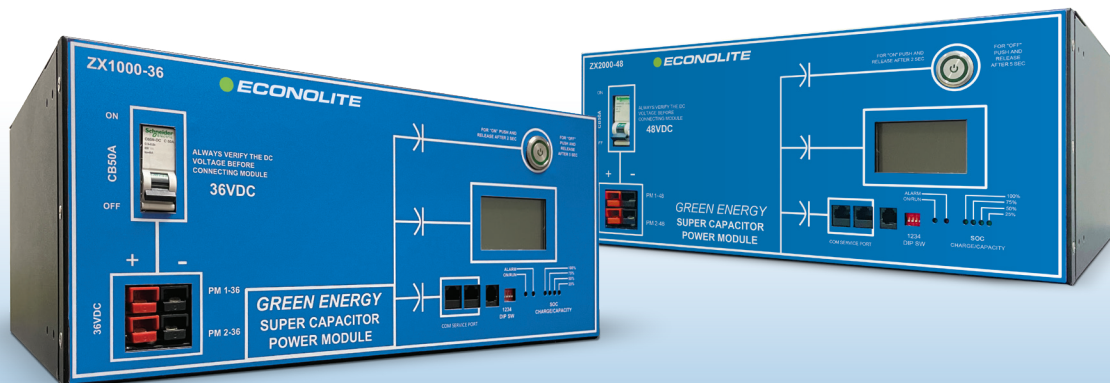
The ZX1000-36 and ZX2000-48 Graphene based Super Capacitor battery modules are an innovative and extremely durable approach to providing battery backup power for traffic intersections. Coupled with the Econolite DBLMXU -36 or -48 series double conversion UPS system they provide scalable green battery energy that will last many years beyond lead-acid batteries in the same application. And because they are not chemical batteries, they are virtually unaffected in their capacity at extremely low or high temperatures unlike lead-acid batteries. They cannot be damaged by storage at low charge and can take hundreds of thousands of charge/discharge cycles and therefore cannot be worn out by frequent outages.

The ZX1000-36 battery module works with other 36V systems, and holds 1000Whr of energy at full charge which is enough to provide the typical sized intersection approximately 2-3 hours of backup. The ZX2000-48 is a 48V battery with the same characteristics for 48V systems but has double the capacity at 2000Whr and provides longer run-times.

The beauty of the design is its scalability and reliability. The battery modules connect in parallel, allowing the user to deploy as many batteries (up to 10) as required for the application. Since they are in parallel it is easy to add or subtract batteries without powering down the system. Add the optional Hot Swap Switch to the system and you can swap out depleted battery modules for fresh ones during a power outage!

Key Features

- Zero Environmental Impact
- Zero Clearance Installation
- Zero Maintenance
- 1,000,000 Discharges and Recharges
- Connect multiple units in parallel for scalable capacity
- 30+ Years of Service Life
- Long Shelf life without Cell Damage
- No Cooling or Heating Pads needed
- Operating Range -40°C to 75°C without de-rating or energy loss
- PP65 Anderson Power Connections
- 10 Year Replacement Warranty



ZX SUPER CAPACITOR STORAGE MODULES			
	Total Maximum Energy	1000Wh	2000Wh
PERFORMANCE	Voltage (Nominal)	36 VDC	48 VDC
	Discharge Cut-Off Voltage	29.8 VDC	40 VDC
	Maximum Charge Voltage	42.6 VDC	56 VDC
	Maximum Charge Current	50 A (Circuit Breaker Limited)	200 A
	Maximum Discharge Current	50 A (Circuit Breaker Limited)	200 A
	PHYSICAL SPECS	Dimensions (W x D x H)	15.9" x 11.8" x 6.9"
Weight		19 Kg/41.8 lbs	24.5 Kg/54 lbs
Module Casing Material		Aluminum	
Terminal Type		Dual Anderson PP75	PP125 or F12
ADDITIONAL FEATURES	Monitoring Data	Total Cell Voltage, Current, Temperature, Energy	
	Communication and Connectivity	RS232/RS485/SNMP	
	Alarms/Audible	Sounds alarm for under/over Voltage, Over Current, Out of Range Temperature	
INTERNAL SOFTWARE	Module Monitoring	Current, Voltage, Temperatures, Percentage of Energy Available (SOC)	
	System Monitoring	Modules Monitoring (connected in parallel)	
SERVICE LIFE	Project Cycle Life	Up to 1 million cycles	
	Project Operational Life	30+ years	
SAFETY	Over/Under Voltage/Over Current	Unit shut down	
	Over Current/Over Temp	Unit shut down	
	Additional Safety	SSR protection + DC current breaker	
BACKUP TIME	Backup Time at Load of 1000/500/250w	1Hr/2Hrs/4Hrs 2Hrs/4Hrs/8Hrs	
ENVIRONMENT	Cell Operating Temperature	-40°C to 75°C without derating output	
	Operating Humidity	5% to 95% Non-Condensing	
WARRANTY	10 Years	87,600 Hrs	

The Super Capacity Battery module provides a nearly linear discharge curve vs voltage

