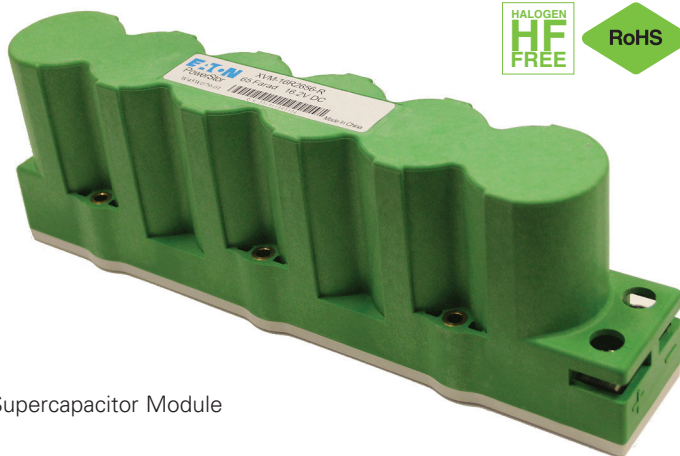


# PowerStor XVM Series

## 16V Supercapacitor Module



Supercapacitor Module

### Description

Eaton PowerStor supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Eaton to offer a wide variety of capacitor solutions tailored to specific applications.

The 16V XVM Series supercapacitor module offers a means to easily achieve higher voltage, power or discharge time through series or parallel connection of multiple modules.

### Features and benefits

- Compact size for easy mounting as replacement for, or in conjunction with a 12V battery
- Series or parallel connection of multiple modules for higher voltage, power or discharge time
- High reliability, green solution for pulse or back up power applications
- Maintenance free

### Applications

- Industrial computer and emergency backup energy
- Battery assist engine starting, especially for cold or frequent starts
- Graceful system shutdown for robotics, PLCs and electrical switches

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The PowerStor brand of supercapacitors (formerly of the Bussmann Division of Cooper Industries) is now part of Eaton's Electrical Group, Electronics Division.

**PowerStor is now part of Eaton**  
**Same great products plus even more.**

## Specifications

<b>Working Voltage</b>	16.2V
<b>Surge Voltage</b>	17V
<b>Capacitance</b>	65F
<b>Capacitance Tolerance</b>	0% to +20% (20°C)
<b>Operating Temperature Range</b>	-40°C to 65°C

## Standard product

Capacitance (F)*	Part Number	Max Initial DC ESR (mΩ)*	Max Continuous Current (A)	Max Leakage Current (mA)*	Max Power (KW)**	Stored Energy (WH)***	Typical Mass (kg)
65	XVM-16R2656-R	22	20	23	3.0	2.3	0.75

\* Capacitance, ESR and Leakage current are all measured according to IEC 62391-1.

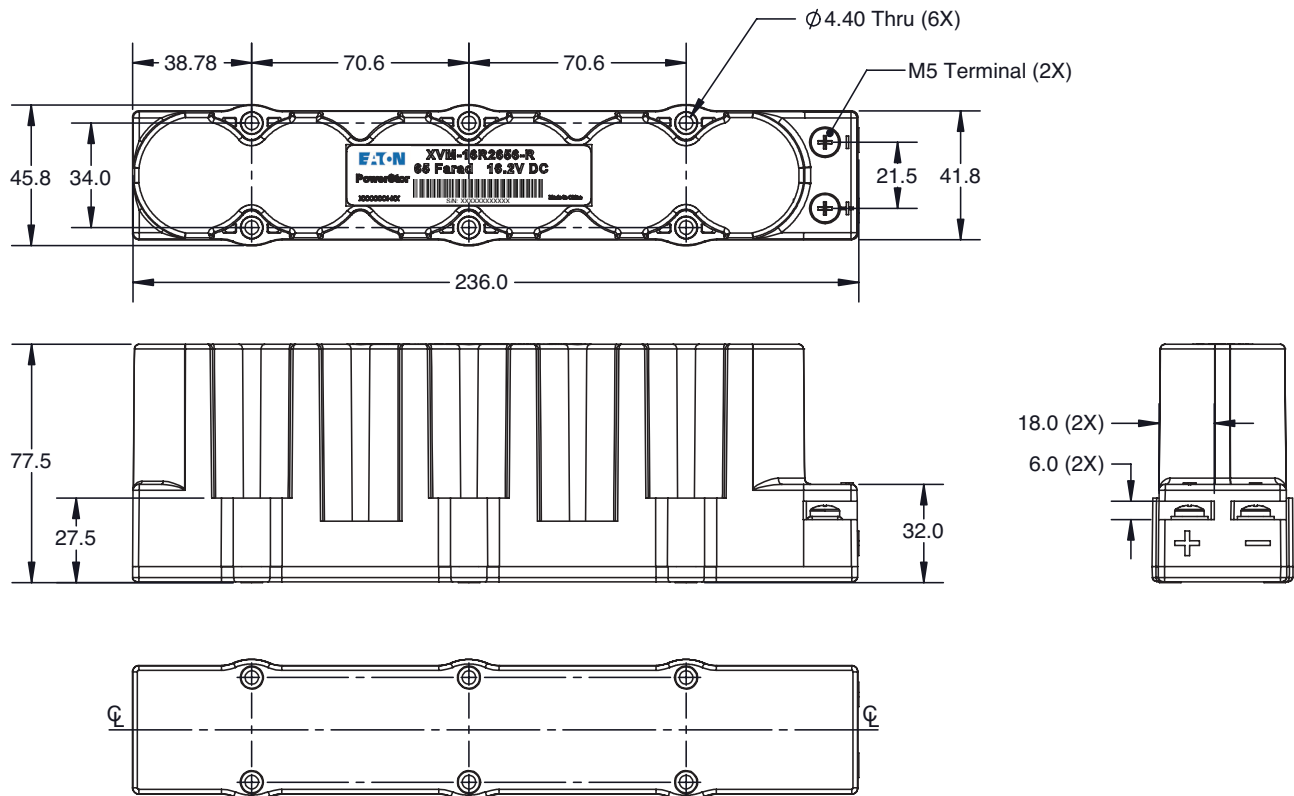
\*\* Max Power =  $V^2 / 4 / \text{DC ESR}$ .

\*\*\* Stored Energy =  $\frac{1}{2} C V^2 / 3600$ .

## Performance

Parameter	Capacitance Change (% of Initial Measured Value)	ESR (% of Initial Measured Value)
Life (1500 hrs @ 65°C @ 16.2Vdc)	≤20%	≤200%
Storage - Uncharged, Non-condensing Atmosphere (1 Year @ -40°C to 70°C)	≤5%	≤10%

## Dimensions - mm



## Agency information

- UL 810A Recognized, File MH46887

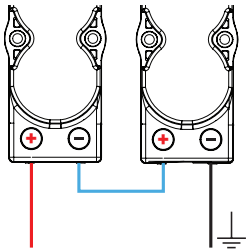
## Environmental

- Vibration Specification: IEC 60068-2-6
- Shock Specification: IEC 60068-2-27, -29
- Protection Level: IP54
- Cooling: Natural Convection

## Mechanical specifications

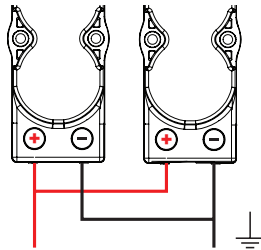
- Terminal Screws: M5 Philslot,  
Nickel-Plated Brass  
Max Torque 4N•m
- Mounting Points: Six, Brass Reinforced,  
Accommodate M4 Screws,  
Min Length 27.5mm  
Max Torque 4N•m
- Mounting Orientation: No Restriction

## Wiring configuration examples



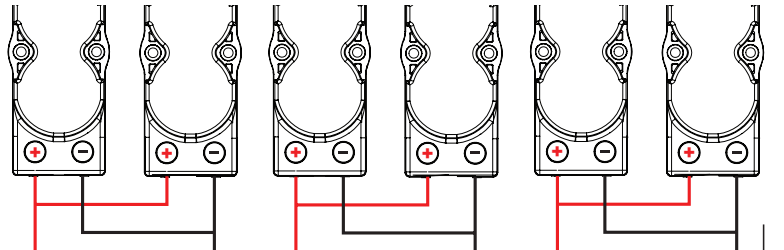
**Series\***

32.4V, 32.5F, 20A



**Parallel**

16.2V, 130F, 40A



**Series/parallel\***

48.6V, 43.3F, 40A

\* Maximum operating voltage 640V.

## Packaging information

- Modules packed individually in a box
- Boxed modules are packed 10 to a carton

## Part marking

- Manufacturer
- Capacitance (F)
- Nominal Working Voltage (V)
- Series Code (or part number)
- Polarity

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