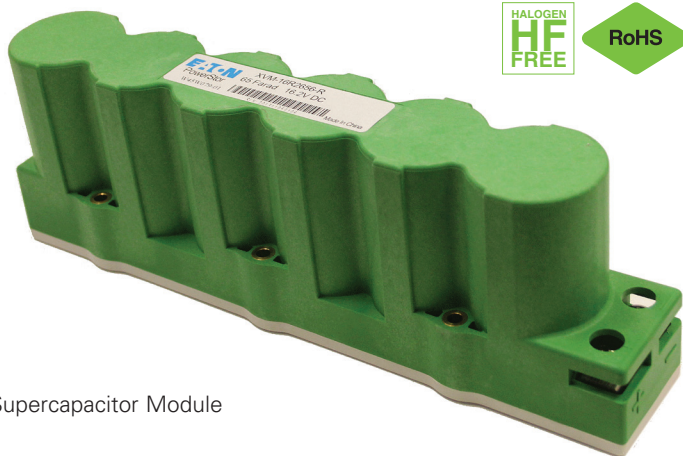


PowerStor XVM Series

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



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

Working Voltage	16.2V
Surge Voltage	17V
Capacitance	65F
Capacitance Tolerance	0% to +20% (20°C)
Operating Temperature Range	-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.

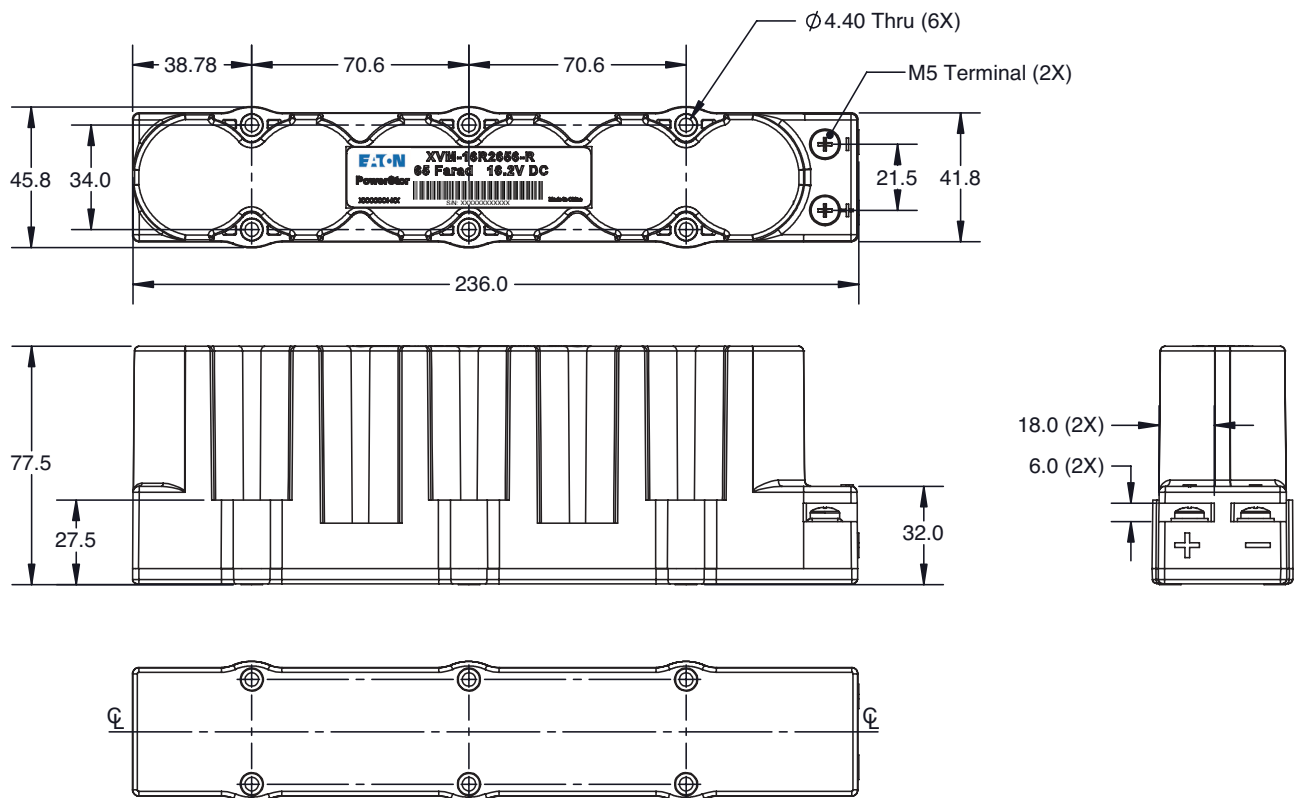
** Max Power = $V^2 / 4 / \text{DC ESR}$.

*** 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

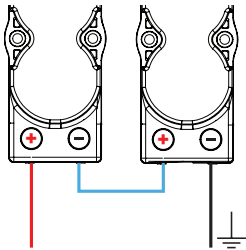
Environmental

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

Mechanical specifications

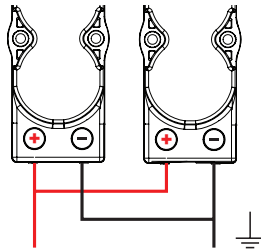
- Terminal Screws: M5 Philslot,
Nickel-Plated Brass
Max Torque 4N•m
- Mounting Points: Six, Brass Reinforced,
Accommodate M4 Screws,
Min Length 27.5mm
Max Torque 4N•m
- Mounting Orientation: No Restriction

Wiring configuration examples



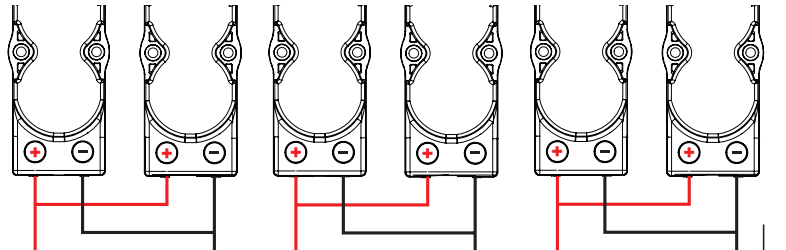
Series*

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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