



Ruggedized, dependable, high power density, long-life supercapacitor modules



The supercapacitor module is compact and easy to install

Product description

Eaton's XLR-LV supercapacitor modules provide industry leading ESR, high power density, and ultra-long lifetimes in applications such as generator starting, material handling systems, wind turbines, transportation systems, rail/traction or many 12 V, 24 V, and even 48 V systems.

The module provides continuous current, reliable power delivery, and high vibration withstand in a modular, industry-standard footprint. The modules can be utilized as stand-alone energy storage or in combination with batteries to optimize cost, lifetime, and runtime needs.

Features and benefits:

- High peak power cycling capability
- Ruggedized enclosure with high-vibration withstand capabilities
- IP65 rated for moisture and dust resistance
- Compact, modular footprint for space constraint applications
- Industry-leading ESR and ultra-long life* with millions of charge/discharge cycles
- Simple integration with integrated cell balancing
- Maintenance-free operation with overvoltage alarm and temperature output



The supercapacitor module is a self-contained energy storage device comprised of 6 individual XL60 supercapacitor cells

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Electrical specifications

Capacitance (F)	Part number	Maximum working voltage (V)	Maximum initial ESR (mΩ)	Leakage current (mA)	Stored energy (Wh)	Peak power (kW)	Pulse current (A)	Continuous current (A)
500	XLR-16R2507B-R	16.2	1.7	5.2	18.2	38.6	2189	121
500	XLR-18R0507B-R	18.0	1.7	8.0	23.0	47.6	2430	121

General specifications

Operating temperature range -40 °C to +65 °C (cell temperature)

Operating life Up to 20 years*

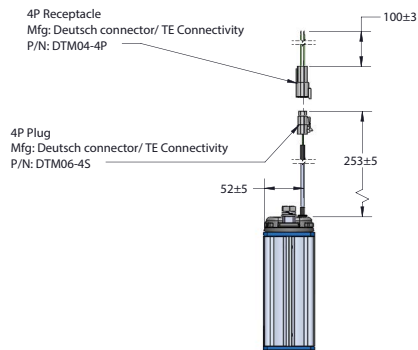
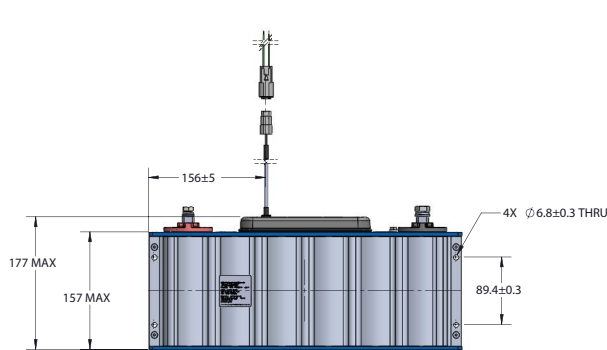
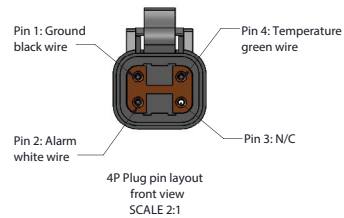
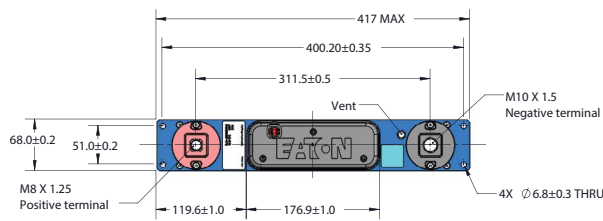
Shock and vibrations SAE J2464 & J2380

Environmental RoHS, CE, IP65

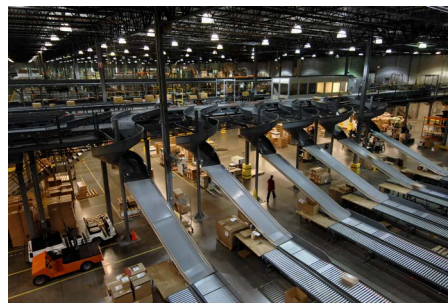
*Supercapacitor lifetimes vary based on charge voltage and temperature. See Eaton's application guidelines or contact your local Eaton sales representative for more information on lifetime estimates

See data sheet for full specification details

Dimensions-mm



Engine / Generator starting



Material handling



Light rail and traction

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