

Ultra Capacitor

ETC-UC-16V500F

FEATURES AND BENEFITS

- » Shock and Vibration Technology
- » Up to 1,000,000 duty cycles
- » Up to 10 year DC life
- » Highest power and energy

TYPICAL APPLICATIONS

- » High shock and vibration environments
- » Automotive subsystems
- » Wind turbine pitch control
- » Hybrid vehicles
- » Rail
- » Heavy industrial equipment
- » UPS & telecom systems

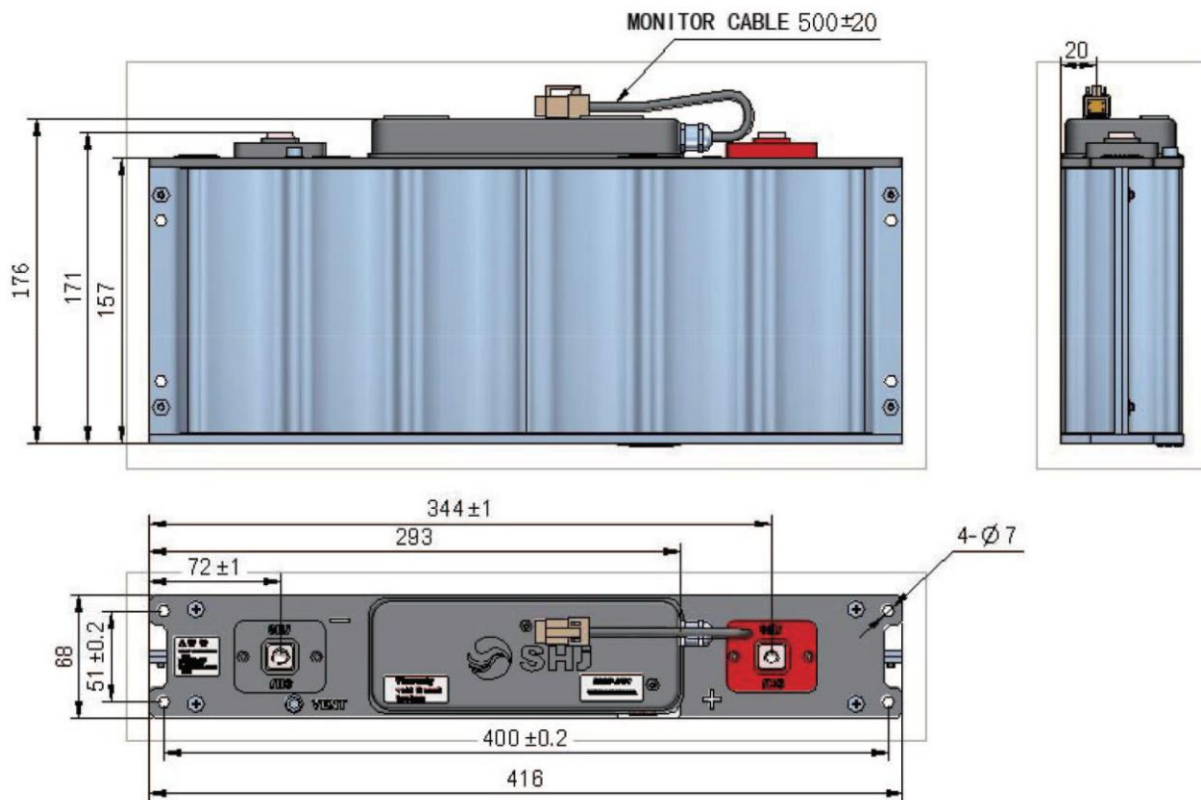


Product Specification

		SPM0160500A0	SPM0160500P0
Electrical	Rated Capacitance	500 F	500 F
	Minimum Capacitance, initial	500 F	500 F
	Maximum Capacitance, initial	600 F	600 F
	Maximum ESR _{DC} , initial, rated value	2.0 mΩ	2.0 mΩ
	Test Current for Capacitance and ESR _{DC}	100 A	100 A
	Rated Voltage	16 V	16 V
	Absolute Maximum Voltage	17 V	17 V
	Absolute Maximum Current	2000 A	2000 A
	Leakage Current at 25°C, maximum	5.2 mA	160 mA
	Maximum Series Voltage	750V	750V
	Capacitance of Individual Cells	3000F	3000F
	Maximum Stored Energy, Individual Cell	3.04Wh	3.04Wh
Number of Cells	6	6	
Temperature	Operating Temperature (Cell Case Temperature)	-40 - 65 °C	-40 - 65 °C
	Storage Temperature (Stored Uncharged)	-40 - 70 °C	-40 - 70 °C
Physical	Mass, typical	5.4kg	5.4kg
	Power Terminals	M8 / M10	M8 / M10
	Recommended Torque - Terminal	20/30Nm	20/30Nm
	Vibration Specification	QC/T 741-2006	QC/T 741-2006
	Shock Specification	ISO 8568-2007	ISO 8568-2007
	Environmental Protection	IP65	IP65
Cooling	Natural Convection	Natural Convection	
Cell Voltage Management	Internal Temperature Sensor	NTC Thermistor	NTC Thermistor
	Temperature Interface	Analog	Analog
	Cell Voltage Monitoring	Overvoltage Alarm	N/A
Power & Energy	Connector	Deutsch DTM	Deutsch DTM
	Cell Voltage Management	Active	Passive
	Usable Specific Power	2800 W/kg	2800 W/kg
	Impedance Match Specific Power	5800 W/kg	5800 W/kg
	Specific Energy	3.4 Wh/kg	3.4 Wh/kg
Stored Energy	18.24 Wh/kg	18.24 Wh/kg	

Safety	Short Circuit Current, typical	7600 A	7600 A
	Certifications	RoHS	RoHS
	High.Pot Capability	2500 VDC	2500 VDC
Cell Voltage Management	Thermal Resistance (R_{ca}), typical	0.70°C/W	0.70°C/W
	Thermal Capacitance (C_{th}), typical	4,300J/°C	4,300J/°C
	Maximum Continuous Current ($\Delta T=15^{\circ}C$)	100A _{RMS}	100A _{RMS}
	Maximum Continuous Current ($\Delta T=40^{\circ}C$)	160A _{RMS}	160A _{RMS}
Life	DC Life at High Temperature	1500h	1500h
	Projected DC Life at 25°C	10 years	10 years
	Projected Cycle Life at 25°C	1'000'000 cycles	1'000'000 cycles
	Shelf Life (stored uncharged at 25°C)	4 years	4 years

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Product dimensions are for reference only unless otherwise identified. Product dimensions and specifications may change without notice.