Backup Power for Harsh and Remote Environments

CBP Modules

- Quick Charge, 500,000 charge cycles
- Not Affected by deep discharges
- Able to withstand extreme temperature environments
- Useful in remote environments (undersea, air/space, remote geographies)
- Provides maintenance free uninterruptible power with use with a Tri-M power solution

Tri-M CBP Modules are maintenance free, high cycling backup power systems designed for embedded applications that may encounter extreme temperatures or require numerous charge cycles. Many of these applications are found in remote locations where access to the systems is expensive or challenging (think undersea or remote geographies).

CBP Modules are based on a PC/104 form factor and use electric double-layer capacitors (EDLC) or ultra-capacitors rather than conventional batteries. Ultra-capacitors have a high power density compared to conventional electrolytic capacitors so they can charge very quickly and are able to be recharged thousands of times. This is beneficial for applications that have either a large number of battery discharge cycles or where a “maintenance free” solution is required such as remote terminals or mobile data collectors.

When mated with a Tri-M power solution (HESC or HPSC), the complete system will provide proven, battery free, long-life uninterruptible power for embedded applications. The CBP Modules are offered in Farad capacities of 10, 23, 25, 58, 250, and 500 providing estimated backup power run-times of 45 seconds to 45 minutes based on a twenty watt load.

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CBP Modules

Specifications

Power		CBP10	CBP23XT	CBP25	CBP58	CBP250	CBP500
Number of cells in series (Farads)		12**	12**	6	6	6	6
Capacitance each cell		30*	70	150	350	1500	3000
Total Capacitance (Farads)		10	23	25	58.33	250	500
Maximum voltage/module*		14.2	13.8	14.2	14.2	14.2	14.2
Maximum Energy Storage in joules (cutoff voltage 7.0V)		763	1623	1908	4451	19080	38160
Maximum holdup time in minutes	5 Watt	2.5	4.62	6.36	14.8	63.6	127.2
	10 Watt	1.27	2.25	3.18	7.4	31.8	63.6
	20 Watt	0.63	1.16	1.59	3.7	15.9	31.8
	40 Watt	0.3	0.5	0.79	1.85	7.95	15.9
	60 Watt	0.2	0.23	0.53	1.2	5.3	10.6

Mechanical/Environmental	CBP10	CBP23XT	CBP25	CBP58	CBP250	CBP500
Weight	0.35 lbs	0.38 lbs	0.7 lbs	0.82 lbs	5.0 lbs	8.0 lbs
Operating Temperature	-40°C to +65°C	-40°C to +85°C	-40°C to +65°C	-40°C to +65°C	-40°C to +65°C	-40°C to +65°C
Storage Temperature	-40°C to +70°C	-40°C to +85°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C

** Maximum recommended operating voltage*
*** 2 strings of cells in parallel*

Ordering Information

Part Number

CBP10	10 Farads capacitive backup power module OEM
CBP23XT	23 Farads capacitive backup power module OEM
CBP25	25 Farads capacitive backup power module OEM
CBP58	58.33 Farads capacitive backup power module OEM
CBP250	250 Farads capacitive backup power module OEM
CBP500	500 Farads capacitive backup power module OEM