

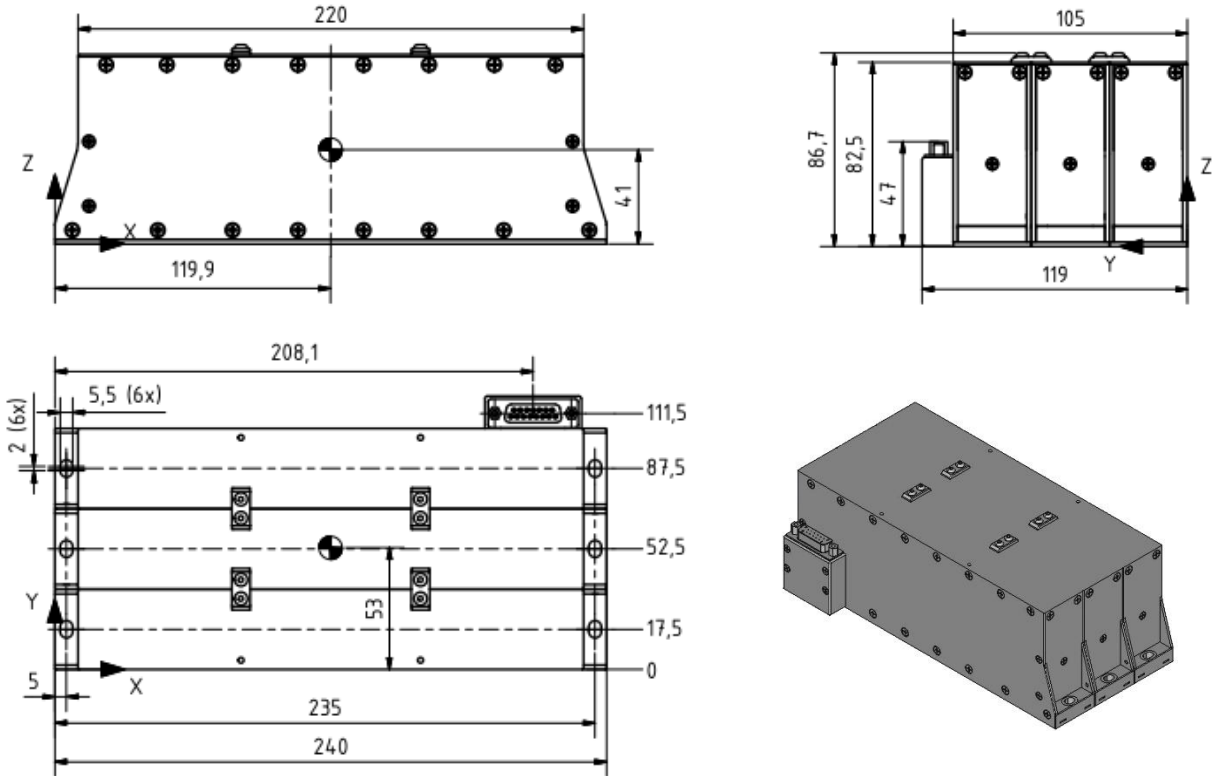
BAT-110

The BST BAT-110 is a modular battery system for small satellites. It is based on Lithium-Ferrite (Li-Fe) cells. The BST's Li-Fe battery technology offers 10x more cycle over Li-Io or Li-Po batteries and is significantly less hazardous. The battery block is protected for over charging (non-destructive), tolerant against deep discharge (non-destructive) and offers cell balancing. It has a design life of 5 years lifetime in LEO and its direct predecessor is space proven.



BST Li-Fe Battery System

CHARACTERISTICS	
Size	240x119x87mm ³
Weight	3000g
Nominal Voltage	23.1V
Capacity	172Wh
Operating Temperature	-20°C to +40°C
Design Life	5 years LEO Tested for >3,000 Cycles @ 0.5C/1C & 100% DoD
Space Heritage	Yes
Radiation Test (Co60)	30 krad



DETAILED CAPABILITIES	
Power Draw	
Peak @ 4C	<690W
Recommended @ 1C	<170W
Deep Discharge Tolerance	non-destructive external protection recommended (Schmitt trigger)
Charging	
Peak	<2.5A per string
Recommended	<1.0A per string
Over Charge Protection	non-destructive & resettable shunt
Lifetime	
Accelerated Lifetime Testing	3000 Cycles @ 1C charge / discharge & 100 % DoD Result: <3% Capacity fade
Modularity	
Voltage	23.1V standard Scalable for 12V, 15V, 18V, 28V
Capacity	2.5Ah per string, 1-10 strings