



## ExCITE EV BESS 30KW/50KWH

### ExCITE EV CHARGER BOOST

### PRODUCT DESCRIPTION

ExCITE EV BESS is an outdoor Battery Energy Storage system designed and made for North America Environment. Canada made system provide direct factory after sales services and peace of mind operation. The power conversion is done by state of art Sierra multiport bidirectional inverters. INVIEW Energy management and monitoring system with powerful flexible and professional software will manage the BESS system. With Inview, you can monitor and control your entire infrastructure. This solution collects data from multiple devices, power converters, batteries (via their BMS) to create a single power management system (PMS) for customers.

Sierra Bidirectional inverter is software configurable. Input can be configured to be able to inject to Grid or not based application rerequired.

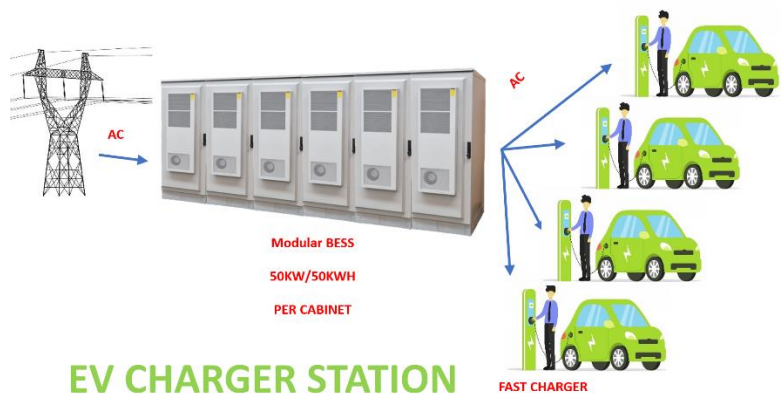
Aluminum made, Electrostatic Polyester powder coated, IP55 Cabinet, equipped with air conditioner, Heat Exchanger or Fan-Filter Plus optional Heater accommodates, and protects electronic components and batteries safe from Harsh or Cold North America environment.

ExCITE: Exchangeable cooling door provides option to change the cooling system easily and fast (1 Hour) in the installed site any time.



## Key Features

- Modularity on Module & system
- Compact, Plug & Play
- Ready to tie to Grid
- Wide range of applications
- Galvanic Isolation
- Made in Canada
- Factory local after sales service.
- Exchangeable cooling (Fan, HEX, Air-con)
- Optional Heater for Cold Environment
- Aluminum Made, Corrosion resistant.
- High Cyclic 48 V LI Battery





### Technical Specification

MODEL	ExcITE-BESS-50/50
<b>General</b>	
MTBF	240 000 hrs (MIL-217F) (for Inverter Modules)
Operating tempratue	-40°C to +70°C depending on integrated cooling & Heating system
Cabinet Material	External walls: Aluminum Electrostatic Polyester Powder Coated, Internal: Metal sheet Electrostatic Polyester Powder Coated
Cabinet size	2000x800x1000 mm
<b>INPUT</b>	
AC Input Voltage	277 V AC Line to Nutral. 480 V AC 3 Phase (4wire)
Voltage range (AC)	150 to 295 Vac (Derating below 190 to 150 VAC) Line to Nutral
AC Input Current	at 277 Vac (58.50 A) line to Nutral per Sierra 25
No of nominal modules	21-Optional 3 redundant available
Power Factor	> 0.99
Frequency range (selectable) / synchronization range	50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz)
<b>AC Output</b>	
Efficiency AC to AC (EPC) / DC to AC / AC to DC	> 96% / > 94.5% / > 94.5%
Nominal voltage AC2	220 / 230 / 240 / 277 Vac line neutral. User adjustable in configuration
Frequency / frequency accuracy	50 or 60 Hz / 0.03%
Nominal Output power (VA) / (W)	53.8 kW (at AC full load, still 6.3 KW available for DC output)
Short time overload capacity	125% (15 seconds)
Admissible load power factor	Full power rating from 0 inductive to 0 capacitive
Total harmonic distortion (resistive load)	< 3%
Load impact recovery time (10% - 90%)	≤ 0.4 ms
Nominal current	64.8 A @ 277 Vac Line to Nutral
Crest factor at nominal power	3 : 1 for load P.F. ≤ 0.7
AC output voltage stability	±1% from 10% to 100% load
<b>DC Output</b>	
Nominal voltage (range)	53.5 Vdc (44 - 60 Vdc)
Maximum power	50.4 kW (at DC full load, still 6.3 KW available for AC output)
Reverse polarity protection	YES
Efficiency AC to DC	> 94.5%
Max. Voltage interruption / total transient voltage duration (max)	0 sec / 0 sec
<b>Cooling &amp; Heating System</b>	
Cooling Systems	DC Air Conditioner- DC Heat Exchanger, DC Fan
Heating system	DC Heaters available
<b>Control and Monitoring</b>	
Inview-X	Web interface (monitoring and configuration).
Display	2.8" capacitive touch-screen
Hardware interfaces	1 x ETH, 2 x CAN, 1 x RS485 1 x USB
Supported protocols	Modbus TCP, SNMP v1, v2C and v3, HTTP/HTTPS
Remote monitoring	LTE Modem
<b>Certification on Inverter Level</b>	
Safety	Inverter: UL1778 Battery: UL1973
EMC	Inverter: EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8 ETSI EN 300386 v1.9.1 / FCCpart 15 class A
Certification on Cabinet Level	CSA (C/US In Process). Infield inspection sticker available

1 On Module level Permanent 2700 W / de-rating apply based on internal heatsink T°

2 Operation within lower voltage networks leads to de-rating of power performances.

3 AC output load is the highest priority. Even if AC output is fully loaded (2.4 kW), still 300 W is available for DC output.

**Inverter Level:** Specifications can change without notice. New data will be updated on CET website: [www.cet-power.com](http://www.cet-power.com). The present equipment is protected by several international patents, trademarks and copyrights.

**Cabinet level:** CSA(C/US) for ExcITE family cabinet is in process.

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