



Energy Access Incorporated

SBS-2502 Smart Battery Series



SMBus	Level 3
Charge rate	4000mA (max)
2 Bays	Simultaneous
Recalibration	SMBus 1000mA (max)
Input Connector	2.5mm, center positive
Weight	13.6oz (385g)
Material	ABS GSM
Color	Black
Dimensions	6.89" x 4.89" x 2.30" (175mm x 124mm x 58mm)

Medical Grade Available



Gang Charger



SBS-2502-00201



SBS-2502-00202



SBS-2502-00204



Custom



Custom



Custom

Target Batteries: Any battery pack that is compliant with the Smart Battery System




- Standard SBS-2502 Kit includes:
- Charger
 - Universal switching power supply
 - Line cord (specific country)
 - Instruction sheet

- Optional Components:
- Vehicle power adaptor

Carton Dimensions:
12.62" x 7.75" x 2.50"



Datasheet

<h3>Charger Kit: Product Part Numbering</h3>					<p>Key: XXX - Charger platform CC - Current capability (Amps x10) BB - Battery bays HHHHH - Housing PPPPPP - Power supply LLLL - UL listed line cord</p>	<p>Agency Approvals:</p>   <p>RoHS</p> 

Not all part numbers displayed

Description

The SBS-2502 is a two bay, level-3, stand alone battery charger that is compliant with the standard Smart Battery System. As such, it can charge any type of battery chemistry provided that the pack adheres to the System Management Bus (SMBus) specifications. The two bays are charged simultaneously and a discharge can be performed in either bay. The SBS-2502 uses an external universal switching power supply of 24V up to 120W.

Absolute Maximum Ratings

Input voltage 40VDC (max)

General

Maximum battery voltage 30V ±0.2VDC
 Minimum battery voltage 4VDC ±0.05VDC
 Maximum charge current 4000mA ±100mA
 Minimum battery current 0mA
 Current granularity 16mA
 Operating temperature 0°C to 50°C
 Emergency shutdown temp. >65°C in either bay

Physical and Environmental

Dimensions 6.89" x 4.89" x 2.30"
 (175mm x 124mm x 58mm)
 Weight 13.6oz (385g)
 Material Black ABS GSM
 Battery bay geometry Various available
 Input connector 2.5mm, center positive
 Storage temperature -20°C to 70°C
 Humidity 15% to 95% (non-condensing)

Recalibration

Implementation Smart batteries only
 Activation Push button
 Basic algorithm Charge-Discharge-Charge
 Discharge rate 1000mA (max)
 Discharge termination Status register=
 xxxx xxxx xxx1 xxxx (Binary)

LED Indications

Off No battery detected
 Green flashing Fast charging
 Green solid Fully charged
 Yellow flashing Recalibrating
 Yellow/green Recalibrated
 Yellow solid Standby or suspend
 Red flashing Error

SBS-4002	Smart Batteries (SMBus)	Non-SMBus
Chemistry	Any	N/A
Termination Algorithm	Status register=xxxx xxxx xx1x xxxx (Binary)	N/A
Termination Value	Determined by pack	N/A
Wake-up Current	~250mA	N/A
Wake-up Period	3 minutes maximum	N/A
Charge Current	Determined by pack	N/A
Charge Voltage Limit	Determined by pack	N/A
Communications Polling Rate	6 seconds	N/A
Suspend Charging	Dependent on battery alarm bits	N/A
Override Timer	None	N/A