



Energy Access Incorporated

I-Bullet Charger Series



Charge current	1000mA (660mA for IB-16800)
Voltage limit	Preset
Termination current	C/10
Input voltage	90VAC to 240VAC
Output connector	Right angle barrel connector (2.5mm DC)
Connector barrel length	0.35" (9mm)
Weight	5oz (135g)
Material	Black ABS GSM
Color	Black
Dimensions	2.95" x 2.00" x 1.56" (75mm x 51mm x 40mm)
Cable	72"-80" (183cm - 200cm)

Target Batteries: Lithium Ion, Lithium Polymer, Nickel Metal Hydride, Nickel Cadmium, Lead Acid

Standard I-Bullet Kit includes:
Charger
Instruction sheet

Optional Components:
Plug adaptors



Datasheet

Charger Kit: Product Part Numbering

Key: XX - Charger platform
VVVVV - Charger voltage setting, mV
000 - Adaptors

Agency Approvals:

XX - VVVVV - 000

IB	04200	AEU - All three adaptors
	08400	A00 - Australia
	12600	0E0 - Europe
	16800	00U - United Kingdom
	0DTDV	



Description

The I-Bullet charger is a low-cost, stand-alone unit designed for use with strings of 1 to 4 lithium ion cells or 1 to 14 nickel metal hydride cells. The nominal charge current is factory set to 1000mA, though other values are available on a special order basis. The unit has a universal input for worldwide use and a standard 6-foot output cable. Lithium ion versions are terminated in a 2.5mm DC plug while the nickel metal hydride version is terminated in bare wires. Other options are also available.

When used with lithium ion cells, the I-Bullet can simultaneously charge a cell string and power a piece of host equipment, provided that the equipment draws less than 500mA nominally. This allows the I-Bullet to be permanently attached to the host product and act as its sole power source. The charging process will restart as needed to keep the cells full. When the cells are full, current is terminated in order to promote long cell life.

Input Supply

Input voltage	90VAC to 240VAC
Frequency	50Hz to 60Hz
North America/Japan wall plug	Built in flip-out blades
Europe wall plug	Adapter available
United Kingdom wall plug	Adapter available
Australia/New Zealand wall plug	Adapter available

Physical and Environmental

Dimensions	2.95" x 2.00" x 1.56" (75mm x 51mm x 40mm)
Weight	5oz (135g)
Material	Black ABS GSM
Storage temperature	-20 C to 85 C
Humidity	15% to 95% (non-condensing)

Standard Output Cable

Length	72"-80" (183cm - 200cm)
Red wire	Positive battery lead
Black wire	Negative battery lead
Green wire	Thermistor lead (used only with NiMH and NiCd)
White wire	Remote LED (used only with NiMH and NiCd)
Output connector	2.5mm (center positive)

LED Indications

Off	No battery detected
Power up	Single green flash
Green flashing	Fast charging
Green solid	Fully charged

I-Bullet	Lithium Ion Chemistry	NiMH Chemistry	NiCd Chemistry	Lead Acid Chemistry	Timed
Termination Algorithm	CCCV	dT/dt (Thermistor required)	Negative delta V	CCCV	Timer
Applicable Range	N/A	Capacity/3 to 3x Capacity	Capacity/3 to 3x Capacity	N/A	< Capacity/6
Termination Value/Point	Current falls to limit value/5	dT/dt or -delta V	dT/dt or -delta V	Current falls to limit value/5	Customer specified
Top-off Charge	1 hour or current falls to limit value/10	100mA for ½ hour after termination indicate	100mA for ½ hour after termination indicate	N/A	N/A
Trickle Charge	N/A	Continuous at C/300	Continuous at C/300	Float	Continuous at C/300
Charge Current Limit	Customer specified	Customer specified	Customer specified	Customer specified	Customer specified
Charge Voltage Limit	Preset to 4.20V/cell up to 16.8V	NA	NA	Customer specified	Customer specified
Override Timer	None	4 hours	4 hours	None	Customer specified
Restart Threshold	7/8 of termination voltage or every 2 hours	N/A	N/A	7/8 of termination voltage	N/A
Number of Cells	1 to 4	1 to 14	1 to 14	2 to 12	2 to 20