

Intelligent Charging Series



500mA - 5000mA Charge rate 2V to 35V Charge range

Input connector 2.5mm, center positive

Weight 6oz (171g) Material ABS GSM Color Black

3.63" x 2.27" x 1.85" **Dimensions**

(92mm x 58mm x 47mm)





ICS-3010-VVVVV

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

Standard ICS Kit includes:

Charger Universal switching power supply Line cord (specific country) Instruction sheet

Optional Components:

Vehicle power adaptor 2-bay housing

Carton Dimensions:

12.56" x 7.68" x 2.46"

4000



Charger Kit: Product Part Numbering

Key: XXX - Charger platform CC - Current capability (Amps x10) BB - Battery bays VVVVV - Charger voltage setting, m

PPPPP - Power supply LLLL - UL listed line cord

V	

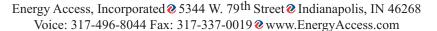
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Agency Approvals:

XXX	-	CCBB	-	VVVVV	-	PPPPPP	-	LLLL
ICS		1000		04200		PS2524		LCUL - North America
		1500		16800		PS2036		LCAS - Australia
		2000		25200		PS3636		LCEC - Europe
		3000		33600		PS0524		LCUK - United Kingdon

VA2524

Not all part numbers displayed



0DTDV

Description

The ICS charger is a stand alone battery charger with the versatility to accommodate a broad array of cell chemistries and configurations. Typical applications include lithium ion (1 to 8 cells), nickel metal hydride (2 to 20 cells), nickel cadmium (2 to 20 cells), and lead acid (2 to 12 cells). The maximum charge current is easily adjustable from 500mA to 5000mA. The unit may be ordered without its plastic housing and output cable for use as a component.

The ICS charger uses an external power supply. Depending on the application, this may be either a universal input switching supply or an inexpensive iron-core wall adaptor. Since the current sensing occurs in the negative battery lead, there must not be a common ground connection established between the battery and the external power supply.

Absolute Maximum Ratings

40DC Input voltage

General

500mA to 5000mA Adjustable charge current Current tolerance ±10% 4V to 35V Voltage limit Voltage limit tolerance ±0.2% Operating temperature 0°C to 50°C

Physical and Environmental

Dimensions 3.63" x 2.27" x 1.85" (92mm x 58mm x 47mm) Weight 6oz (171g) Material Black ABS GSM 2.5mm, center positive Input connector

Storage temperature -20°C to 80°C Humidity 15% to 95% (non-condensing)

Standard Output Cable

Length Red wire Black wire Green wire 8", stripped and tinned Positive battery lead Negative battery lead Thermistor lead (used only with NiMH and NiCd)

LED Indications

No battery detected Power-up Red-yellow-green-off Green flashing Fast charging Green solid Fully charged Yellow solid

Out of temperature range

Red/green flashing Shorted terminals

Red flashing Error

ICS	Lithium Ion Chemistry	NiMH Chemistry	NiCd Chemistry	Lead Acid Chemistry	Timed
Termination Algorithm	cccv	dT/dt	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	0.75°C/minute ±0.1°C/minute	52mV ±5mV	Current falls to limit value/5	Customer specified
Top-off Charge	1 hour or current falls to limit value/10	1 hour at C/10	1 hour at C/10	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	Customer specified	Disabled	Disabled	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 8	2 to 20	2 to 20	2 to 12	2 to 20