Universal Battery Charger

POWER SOLVE

PSCH30
NiMH/NiCD Smart Charger

Features

- Universal 90-264VAC Input
- IEC320 C14 3 pin AC Input Connector
- Auto detect output can charge 8 to15 NiMH or NiCD cells in series
- Switch Selectable Charge Current
- Automatic cut off when batteries fully charged
- Battery Over Temperature Protection (supplied with thermal sensor)
- EMC to EN55022'B', CISPR22 'B' & FCC 'B'
- Compact Desk Top Plastic Enclosure
- Optional DC Output Connectors

Electrical Specification

INPUT	
Input Voltage	90-264VAC 2A max
Input Frequency	47-63Hz
Safety Ground Leakage Current	<0.5mA
OUTPUT	
Output Voltage	Varies to charge 9.6V to 18V DC battery pack
Charging Current	500mA to 1.8A (output can be switched to charge at 0.9A or 1.8A)
LED Charge Status Indicator	LED flashes Red then Green twice after power on then switches off in standby. LED is Red when charging and turns Green when battery fully charged. LED will flash on and off RED for error status
Over Voltage Protection	Sense level 24V, OVP at 27V max
Short Circuit Protection	Short circuit with auto recovery
Reverse Polarity Protection	Reverse polarity of battery on output will not damage charger
Over Temperature Protection (optional)	When battery temperature is above 55ºC the charger will immediately turn to trickle-off charge and green LED will turn on
Efficiency	75% minimum at full load and 115VAC input
ENVIRONMENTAL	
Operating Temperature	0 to 40ºC, ambient
Storage Temperature	-40ºC to +70ºC
Relative Humidity	20-85% max operating
SAFETY & EMC	
Safety	UL/cUL1310, EN60335-2-29:2004, EN60335-1, CE
EMI/EMC	CISPR22 'B', FCC Part 15 'B', EN55022 'B'
MECHANICAL	UL94V-1 plastic enclosure, dimensions 120 x 60 x 38mm, output cable 1.2 metre termintated in 4 pin Toby KPPX-4P connector

Charge Curve

Charge Current (A)

$-\Delta V$

0.9A/1.8A

D=1/20

Time
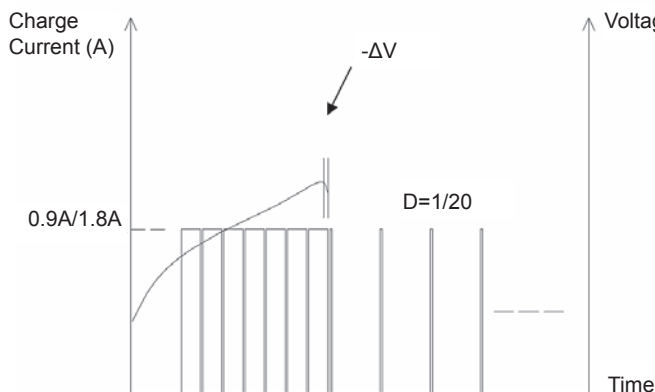
Voltage (V)

This charger can charge between 8 and 15 NiMH or NiCd cells connected in series and will detect and provide the correct output voltage and current to suit.
End charge is by $-\Delta V$ (about 5mV for each cell) detection, after $-\Delta V$. It will turn to trickle-off charge, it's charger current is fast charging current of 1/20.