

INTRODUCTION

Backup power supply for instruments and control relays is an important part of instrumentation and control system in the modern world. HTM BC2410 automatic battery charger is a purposely designed, versatile and compact battery charger that is used to provide continuous 24VDC power supply to power instruments connected to it and at the same time charging back up batteries for use during AC power failure. The unit is housed in a compact, lightweight metal casing equipped with voltmeter, ammeter, switch with indicator, standard British plug and heavy duty terminals for connection to equipment and batteries.

PRINCIPLE OF OPERATION

The HTM BC2410 is a constant voltage charger which varies the charge current according to the voltage level of batteries connected. Optional *float* and *boost* charge device can be provided. The charger voltage of BC2410 is factory set to suit type of battery used as recommended by battery manufacturer. The high performance switching power supply embedded in the charger, together with an integral power line filter, provide a regulated, noise filtered, clean and high quality power output normally demanded by the instrumentation industry. The voltmeter and ammeter on the front facial of the charger enable status of the charger to be monitored closely.

FEATURES

Integral Power Line Filter

HTM BC2410 incorporates an integral power line filter which effectively eliminates electrical noise



generated by motors, inverters or electrical spikes induced during lightning strike, hence making it suitable for use in lightning-prone areas where normally remote instruments are installed.

Specially Designed for Instrumentation

The 24V 10A current output of BC2410 is the optimum capacity for charging back batteries of typical instrumentation systems, which normally run on 24VDC to provide backup of 24 hours to 8 days.

Voltmeter and Ammeter

Voltmeter and ammeter are available at the front facial for monitoring of charger output.

Alarm/Status Outputs

Standard BC2410 is equipped with *Mains On* and *Battery Low* contacts for connection to monitoring circuits.

Lightweight and Compact Enclosure

The enclosures of HTM BC2410 are fabricated from polyester coated mild steel casing with ventilated

louvers and fan. Standard units are equipped with portable handle for easy handling.

High Temperature and Overload Protection

In the event of high temperature or high current output due to short circuit or equipment fault, BC2410 will automatically shut down to prevent damages. The unit is automatically reset by switching off and on the main switch manually.

Redundancy

The HTM BC2410 automatic battery chargers can be connected in parallel and powered on at the same time to provide redundancy and added capacity.

High Service Life

The main components of BC2410 consist of components from reputable makes with low MTBF of up to 170,000 hours. Therefore, high service life can be ensured.

Over-Charging Protection

The charging voltage of BC2410 is set to avoid over-charging of batteries.

OPTIONS

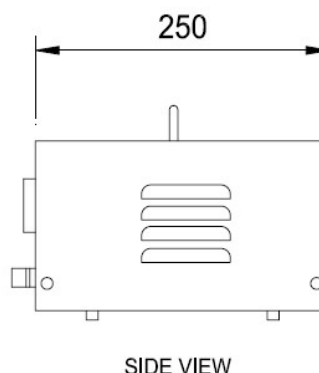
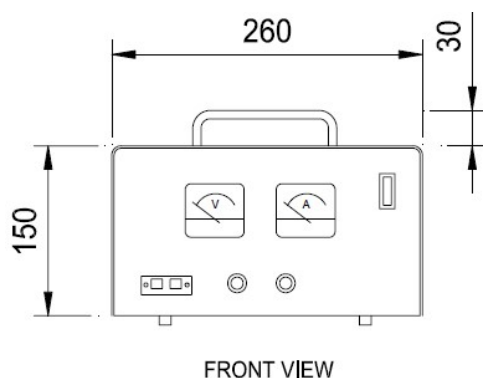
The following options are available upon request:

- Float and boost charge device
- Charger failed contact
- Low battery voltage cut-off protection
- Separate output and battery terminals

SPECIFICATIONS

Type	Continuous, automatic
Operating voltage (max.)	264VAC 50/60Hz
Output voltage range	20 to 28V
Set voltage	26.4V
Current rating	10A
Ripple and noise (max.)	180mVp-p
Battery low contact	22V
Main switch	Rocker switch with neon light
Casing material	Polyester coated steel
Battery type	Sealed lead acid or Nicad
Inlet	13A UK main plug
Output	16A shrouded panel sockets
Operating temperature	-10 to 60°C
Relative humidity	20 to 90% non-condensing
Dimensions (D x W x H)	250 x 260 x 150mm
Weight	6kg
Cord length	600mm
Mounting	Table top with rounded handle

DIMENSIONS (MM)



All rights reserved. The information in this document is subject to change without notice.

Manufactured by :



HYDRO-TRENT AUTOMATION SDN. BHD. (475419-P)

No.23, Jalan TIB 1/9, Taman Industri Bolton, 68100 Batu Caves, Selangor Darul Ehsan, Malaysia.
Tel : 03-6186 9818 Fax : 03-6186 0833 E-mail : htmsb@hydrotrent.com
<http://www.hydrotrent.com>