

# DSEBC2415i

24 Volt, 15 Amp Battery Charger



## ADVANCED FEATURES

- Intelligent three and four stage charging profiles
- Adjustable current limit
- Option to use as a battery charger, power supply or both
- Automatic or manual boost and storage charge functions to help maintain battery condition
- Digital microprocessor technology
- Temperature compensation for battery charging
- Low output ripple and superb line regulation
- Three LED indicators
- Switched mode design
- Fully customisable battery charging curves
- Battery health check
- Battery voltage sensing
- Deep sleep mode
- PSU only mode
- Automatic voltage detection
- Wide output current range

## Full Protection

- AC input under / over voltage
- Battery charger output over voltage
- Battery charger output over current
- Battery under voltage alarm
- Automatic battery detection
- Automatic battery charger self test
- Output short circuit and inversion polarity with auto recovery
- Max current mode
- SCADA digital input status information
- Automatic power de-rating at high ambient temperatures.
- Optional battery temperature compensation using PT1000 temperature sensor with over temperature protection

## Automatic Boost Mode

- Boosts and equalises cell charge, improving battery performance

## Power Save Mode

- Once the battery is fully charged, the chargers switch to eco-power

## Communication

- Can be integrated into external systems through MODBUS RTU using RS485
- Fully configurable via DSE Configuration Suite PC Software
- DSE2541 remote display option

## KEY BENEFITS

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Minimum 86% operating efficiency
- No external intervention for boost mode
- Multiple chargers can be linked together to provide larger current outputs
- Can be permanently connected to a battery and AC supply. No need to disconnect through high load conditions such as cranking or when the engine is running.

## SPECIFICATIONS

### AC SUPPLY

**VOLTAGE RANGE**  
90 V to 305 V (L to N)

**FREQUENCY RANGE**  
48 Hz to 64 Hz (L to N)

### DC OUTPUT

15 A DC at 24 V DC

**RIPPLE AND NOISE**  
<1%

**EFFICIENCY**  
>90%

**REGULATION LINE**  
<0.5%

**LOAD**  
2%

**TEMPERATURE SENSOR INPUT**  
PT1000

### PROTECTIONS

Short circuit  
DC over voltage  
DC over current  
Reverse polarity  
Over temperature  
AC under & over voltage

**CHARGE FAILURE RELAY**  
3 A at 30 V DC volt free relay

### DIMENSIONS

**OVERALL**  
80 mm x 205 mm x 135 mm  
3.1" x 8.1" x 5.3"

**WEIGHT**  
0.88 kg

### OPERATING TEMPERATURE RANGE

-30 °C to +70 °C  
-22 °F to +158 °F

### STORAGE TEMPERATURE RANGE

-30 °C to +70 °C  
-22 °F to +158 °F

## RELATED MATERIALS

### TITLE

DSEBC2415i Series Configuration Suite PC Software Manual  
DSE Configuration Suite Installation & Operators Manual  
DSEBC2415i Installation Instructions  
DSEBC2415i Series Operators Manual

### PART NO.

057-353  
057-151  
053-265  
057-352

## DEEP SEA ELECTRONICS LTD UK

Highfield House, Hunmanby Industrial Estate, Hunmanby YO14 0PH  
**TELEPHONE** +44 (0) 1723 890099

**EMAIL** sales@deepseaelectronics.com **WEBSITE** www.deepseaelectronics.com

## DEEP SEA ELECTRONICS INC USA

3230 Williams Avenue, Rockford, IL 61101-2668 USA  
**TELEPHONE** +1 (815) 316 8706 **FACSIMILE** +1 (815) 316 8708

**EMAIL** usasales@deepseaelectronics.com **WEBSITE** www.deepseaelectronics.com

# DSEBC2415i

## 24 Volt, 15 Amp Battery Charger

The DSEBC2415i is an intelligent 24 volt, 15 amp switch-mode battery charger that can be programmed for different charging curves, making the product suitable for multiple battery types.

The charger is programmed using the DSE Configuration Suite software, can be chassis or DIN rail mounted and has three integrated LEDs to indicate current charging status and fault conditions.

The charger has no moving parts, delivering additional durability and reliability and continues to operate when the engine is running.

Multiple chargers can be linked to provide a larger current output should this be required.

### ENVIRONMENTAL TESTING STANDARDS

#### ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2  
EMC Generic Immunity Standard for the Industrial Environment  
BS EN 61000-6-4  
EMC Generic Emission Standard for the Industrial Environment

#### OPERATING TEMPERATURE RANGE

BS EN 60068-2-1  
Ab/Ae Cold Test -30 °C  
BS EN 60068-2-2  
Bb/Be Dry Heat +80 °C  
\* Refer to de-rating curve in the DSE9000 Operator Manual

#### VIBRATION

BS EN 60068-2-6  
Ten sweeps in each of three major axes  
5 Hz to 8 Hz @ +/-7.5 mm,  
8 Hz to 500 Hz @ 2 gn

#### HUMIDITY

BS EN 60068-2-30  
Db Damp Heat Cyclic 20/55 oC  
@ 95% RH 48 Hours  
BS EN 60068-2-78  
Cab Damp Heat Static 40 oC  
@ 93% RH 48 Hours

#### SHOCK

BS EN 60068-2-27  
Three shocks in each of three major axes  
15 gn in 11 mS

## COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF BATTERY CHARGER APPLICATIONS

