

# DSE9450, DSE9452 & DSE9479

## INTELLIGENT BATTERY CHARGERS

### 50 AMP & 100 AMP, 24 V & 48 V OPTIONS



#### ADVANCED FEATURES

- Intelligent two, three and four stage charging profiles
- Remote voltage sensing to compensate for voltage drop
- Adjustable current limit
- Can be used as a battery charger, power supply or both at the same time
- Additional auxiliary 12 V supply output
- 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 LEDs indication

#### Full Protection

- AC input under voltage
- AC input over voltage
- Battery charger output over voltage
- Battery charger output over current
- Battery low voltage detection
- Battery temperature compensation

- with over temperature protection
- Output short circuit and inversion polarity with auto recovery
- Automatic power de-rating at high ambient temperatures.
- Optional battery temperature compensation using PT1000 temperature sensor

#### Automatic Boost Mode

- Boosts and equalises cell charge improving battery performance and life

#### Power Save Mode

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

#### Communication

- Can be integrated in to external systems through MODBUS RTU using RS485 & J1939 using CANBUS
- Fully configurable via DSE Configuration Suite PC Software
- External remote LCD option - DSE2541

#### KEY BENEFITS

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Switched mode design
- Charge fail output
- Minimum 90% efficiency throughout full operating range
- Manual / Automatic boost mode
- Multiple chargers can be linked together to provide larger current output
- Can be permanently connected to battery and AC supply. No need to disconnect through high load conditions.

#### SPECIFICATIONS

##### AC SUPPLY

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

**FREQUENCY RANGE**  
45 Hz to 65 Hz (L-N)

**CHARGE OUTPUT DSE9450**  
**RATING AT 180 V TO 305 V SUPPLY**  
50 A DC at 48 V DC

**RATING AT 90 V TO 170 V SUPPLY**  
30 A DC at 48 V DC

**RIPPLE AND NOISE**  
1%

**EFFICIENCY**  
>90%

**CHARGE OUTPUT DSE9452**  
**RATING AT 90 V TO 305 V SUPPLY**  
50 A DC at 24 V DC

**RIPPLE AND NOISE**  
1%

**EFFICIENCY**  
>90%

**CHARGE OUTPUT DSE9479**  
**RATING AT 180 V TO 305 V SUPPLY**  
100 A DC at 24 V DC

**RATING AT 90 V TO 170 V SUPPLY**  
60 A DC at 24 V DC

**RIPPLE AND NOISE**  
1%

**EFFICIENCY**  
>90%

**REGULATION LINE**  
1%

**LOAD**  
3%

**AUXILIARY SUPPLY**  
100 mA DC at 12 V DC

**TEMPERATURE SENSOR INPUT**  
PT1000

##### PROTECTIONS

Short Circuit  
DC Under & Over Voltage  
DC Over Current  
Reverse Polarity  
Over Temperature  
AC Under & Over Voltage

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

##### DIMENSIONS

**OVERALL**  
523 mm x 275 mm x 131 mm  
20.2" x 10.3" x 4.9"

**WEIGHT**  
8.5 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

DSE9400 Series Configuration Suite PC Software Manual  
DSE Configuration Suite Installation & Operator Manual  
DSE9450, DSE9452 & DSE9479 Installation Instructions  
DSE9450 & DSE9452 Operator Manual  
DSE9479 Operator Manual

#### DEEP SEA ELECTRONICS PLC UK

Highfield House, Hunmanby Industrial Estate, Hunmanby YO14 0PH  
**TELEPHONE** +44 (0) 1723 890099 **FACSIMILE** +44 (0) 1723 893303  
**EMAIL** sales@deepseapl.com **WEBSITE** www.deepseapl.com

##### PART NO.

057-159  
057-151  
053-178  
057-240  
0537-264

#### DEEP SEA ELECTRONICS INC USA

3230 Williams Avenue, Rockford, IL 61101-2668 USA  
**TELEPHONE** +1 (815) 316 8706 **FACSIMILE** +1 (815) 316 8708  
**EMAIL** sales@deepseausa.com **WEBSITE** www.deepseausa.com

# DSE9450, DSE9452 & DSE9479

## INTELLIGENT BATTERY CHARGERS

### 50 AMP & 100 AMP, 24 V & 48 V OPTIONS

The DSE9450, DSE9452 and DSE9479 are intelligent battery chargers that can be programmed for different charging curves to maximise the life of the battery.

All chargers are programmed using the user-friendly DSE Configuration Suite PC software.

The chargers are mounted to the chassis using the fixing holes that are built into the case and via a supplied bracket. The chargers' stylish design includes three coloured LEDs to indicate charging status and fault conditions.

Multiple chargers can be linked together to provide a larger current output.

#### 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 +70 °C  
\* Refer to de-rating curve in the DSE9450 Operator Manual

##### VIBRATION

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

##### HUMIDITY

BS EN 60068-2-30  
Db Damp Heat Cyclic 20/55 °C at 95% RH 48 Hours  
BS EN 60068-2-78  
Cab Damp Heat Static 40 °C at 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

