



# On-Board Battery Charger

Simplified Battery Charging



With on-board battery chargers standard on battery-powered machines, NSS provides a more consistent, more convenient, and more reliable solution to battery chargers.

- On-board battery chargers offer charging anywhere that power is available. By keeping the charger on the machine, damage resulting from pulling traditional chargers off of the storage shelf is eliminated. Integral cord wraps and detachable power cords make crushed plugs a thing of the past.
- For our larger 24V and 36V battery packs, the NSS Dual Pro on-board battery charger is designed to be the most versatile and easy-to-use battery charger we have ever offered. The NSS Dual Pro charger combines low-frequency charging with a microprocessor controller to deliver a broad range of performance without any operator intervention.
  - Direct from our factory, this charger can be used on any brand of flooded lead-acid or AGM battery between 200 AH and 350 AH without any modifications or algorithm changes. Simply install the new batteries and the proprietary logic built into the charger will handle the rest.
  - For Gel batteries between 200 AH and 350 AH, remove a top cover panel and move a single jumper. A light on the front of the charger will illuminate, indicating the charger is now ready to accept gel batteries. No other modifications or algorithm changes are needed.
  - Designed for world-wide use, the charger automatically detects voltage and frequency of the input current. Rated for 100V, 115V and 230V at 50 Hz and 60 Hz.
- For our smaller battery packs, NSS offers an SPE high-frequency charger. This charger is microprocessor controlled and is well suited for 24 V battery packs below 200 AH.

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## Dual Pro Specifications

### DC Output

Current-Maximum  
24V - 36V 25 Amps

### AC Input

Voltage-Maximum 24V 9 Amps  
Voltage-Maximum 36V 12 Amps  
Frequency 50-60  
Current-Maximum 12 Amps @ 100 VAC  
Current-Nominal 9.5 Amps @ 155 VAC  
5 Amps @ 230 VAC

### Operation

Battery Type Indicator Flooded/AGM or Gel  
30% Charge Indicator LED  
60% Charge Indicator LED  
90% Charge Indicator LED  
100% Charge Indicator LED  
Fault Indicator Flash codes (see operation manual)

### Construction

Housing Steel

### Connection

DC 12 AWG pos output with 3/8 ring terminal, 12 AWG neg output with 3/8 ring terminal, 18 AWG pos output interlock with 1/4 Faston terminal

### Dimensions

Length 9 in. (22.8 cm)  
Height 8.5 in. (21.6 cm)  
Width 5.5 in. (14 cm)  
Weight 26 lbs. (11.8 kg)

**Warranty** Three years on new machine



## SPE Specifications

### DC Output

Current-Maximum  
12V - 24V 12 Amps

### AC Input

Voltage-Nominal 115 / 230  
Frequency 50-60  
Current-Maximum 4.5 Amps @ 115 VAC  
2.25 Amps @ 230 VAC

### Operation

AC Power Indicator Red LED  
80% Charge Indicator Yellow LED  
100% Charge Indicator Green LED  
Display Indicator Selection button toggles view between charging current, voltage, charging time, amp-hours, and energy used

### Construction

Housing Plastic

### Connection

DC 7 ft. (2 m) 12 AWG cable  
AC IEC 320/C14

### Dimensions

Length 8 in. (20 cm)  
Height 3.25 in. (8.25 cm)  
Width 4.75 in. (12 cm)  
Weight 4.25 lbs. (2 kg)

**Warranty** Two years on new machine



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Specifications subject to change without notice.

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