

LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER: AP017-HC SERIES

– HIGH CURRENT STANDARD PLUG & PLAY (350A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS



NeverDie® BMS Features	Standard Series (12V to 51V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Bluetooth Only
BMS Data Telemetry – Ethernet TCP/IP	
Dual Channel (Independent Charge/Discharge Channels)	
Redundant Coil-Driven Contactor	
Internal Pre-Charge Circuit (Programmable)	

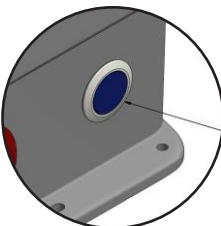
Ampseal I/O Features	Standard (8-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	
Automatic Generator Start/Restart (AGSR)	
External Pre-Charge Circuit Control (Alternate: Heater Power)	
BMS Auxiliary Power Input (AC Sense)	
High Voltage Charger Interlock	
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	
Alarm Circuit	
Battery Percent (0-5V Signal)	
Emergency Stop Input (E-Stop Circuit)	

To see full list of comparison, reference the NeverDie® BMS Catalog available on the homepage of our website. <https://lithionicsbattery.com>

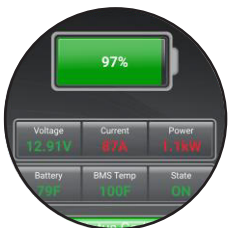
STANDARD NEVERDIE® ACCESSORIES



▶ Ampseal I/O Connector



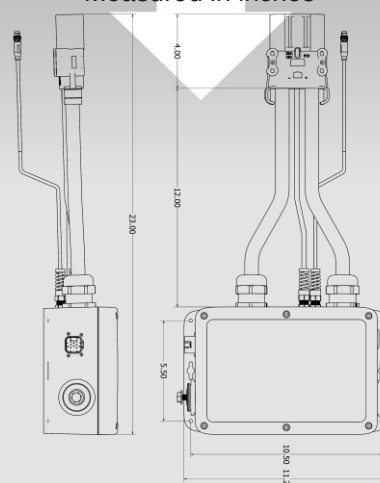
▶ NeverDie® Reset/Power Switch



▶ NEW! Now with Bluetooth® Transmitter

DIMENSIONS

11.25 X 4.06 X 22.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:

AP017 SERIES - STANDARD PLUG & PLAY (300A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS



NeverDie® BMS Features	Standard Series (12V to 51V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Bluetooth Only
BMS Data Telemetry – Ethernet TCP/IP	
Dual Channel (Independent Charge/Discharge Channels)	
Redundant Coil-Driven Contactor	
Internal Pre-Charge Circuit (Programmable)	

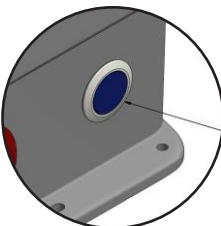
Ampseal I/O Features	Standard (8-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	
Automatic Generator Start/Restart (AGSR)	
External Pre-Charge Circuit Control (Alternate: Heater Power)	
BMS Auxiliary Power Input (AC Sense)	
High Voltage Charger Interlock	
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	
Alarm Circuit	
Battery Percent (0-5V Signal)	
Emergency Stop Input (E-Stop Circuit)	

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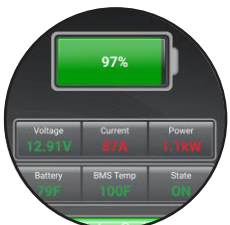
STANDARD NEVERDIE® ACCESSORIES



▶ Ampseal I/O Connector



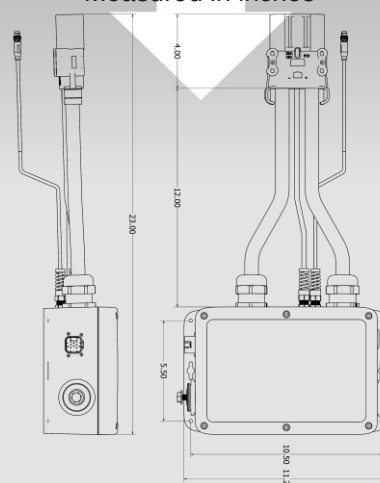
▶ NeverDie® Reset/Power Switch



▶ NEW! Now with Bluetooth® Transmitter

DIMENSIONS

11.25 X 4.06 X 22.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER: AP036-HC SERIES

– HIGH CURRENT HIGH VOLTAGE 102V-512V (400A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS

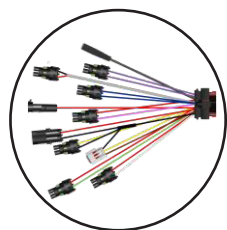


NeverDie® BMS Features	High Voltage Series (102V to 512V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	✓
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Order Option
BMS Data Telemetry – Ethernet TCP/IP	Optional
Dual Channel (Independent Charge/Discharge Channels)	
Redundant Coil-Driven Contactor	
Internal Pre-Charge Circuit (Programmable)	✓

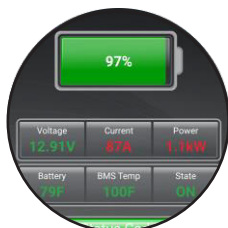
Ampseal I/O Features	Advanced (23-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	✓
Automatic Generator Start/Restart (AGSR)	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)	✓
BMS Auxiliary Power Input (AC Sense)	✓
High Voltage Charger Interlock	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	✓
Alarm Circuit	✓
Battery Percent (0-5V Signal)	✓
Emergency Stop Input (E-Stop Circuit)	✓

To see full list of comparison, reference the NeverDie® BMS Catalog available on the homepage of our website. <https://lithionicsbattery.com>

HIGH VOLTAGE NEVERDIE® ACCESSORIES



▶ Ampseal I/O Connector



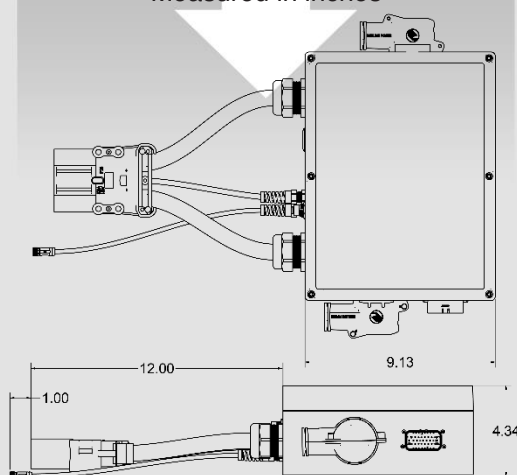
▶ Bluetooth® Transmitter



▶ Round SOC Display

DIMENSIONS

15.50 X 4.34 X 21.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:
AP036 SERIES – HIGH VOLTAGE 102V-512V (300A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS

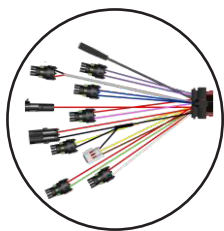


NeverDie® BMS Features	High Voltage Series (102V to 512V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	✓
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Order Option
BMS Data Telemetry – Ethernet TCP/IP	Optional
Dual Channel (Independent Charge/Discharge Channels)	
Redundant Coil-Driven Contactor	
Internal Pre-Charge Circuit (Programmable)	✓

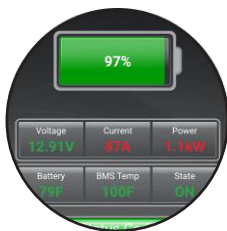
Ampseal I/O Features	Advanced (23-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	✓
Automatic Generator Start/Restart (AGSR)	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)	✓
BMS Auxiliary Power Input (AC Sense)	✓
High Voltage Charger Interlock	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	✓
Alarm Circuit	✓
Battery Percent (0-5V Signal)	✓
Emergency Stop Input (E-Stop Circuit)	✓

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HIGH VOLTAGE NEVERDIE® ACCESSORIES



▶ Ampseal I/O Connector



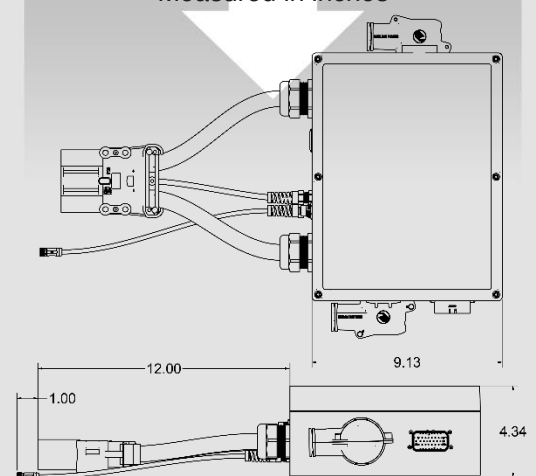
▶ Bluetooth® Transmitter



▶ Round SOC Display

DIMENSIONS

15.50 X 4.34 X 21.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER: AP037-HC SERIES

– HIGH CURRENT ADVANCED PLUG & PLAY (350A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS

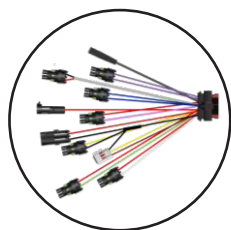


NeverDie® BMS Features	Advanced Series (12V to 96V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	✓
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Order Option
BMS Data Telemetry – Ethernet TCP/IP	Optional
Dual Channel (Independent Charge/Discharge Channels)	
Redundant Coil-Driven Contactor	Optional
Internal Pre-Charge Circuit (Programmable)	Optional for 48V to 96V

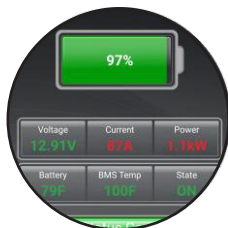
Ampseal I/O Features	Advanced (23-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	✓
Automatic Generator Start/Restart (AGSR)	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)	✓
BMS Auxiliary Power Input (AC Sense)	✓
High Voltage Charger Interlock	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	✓
Alarm Circuit	✓
Battery Percent (0-5V Signal)	✓
Emergency Stop Input (E-Stop Circuit)	✓

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ADVANCED NEVERDIE® ACCESSORIES



▶ Ampseal I/O Connector



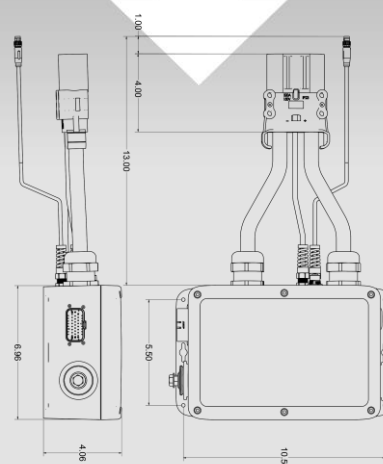
▶ Bluetooth® Transmitter



▶ Round SOC Display

DIMENSIONS

11.25 X 4.06 X 22.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER: AP037-HC SERIES
– HIGH CURRENT DUAL CHANNEL (350A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS



NeverDie® BMS Features	Dual Channel Series (12V to 51V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	✓
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Order Option
BMS Data Telemetry – Ethernet TCP/IP	Optional
Dual Channel (Independent Charge/Discharge Channels)	✓
Redundant Coil-Driven Contactor	
Internal Pre-Charge Circuit (Programmable)	

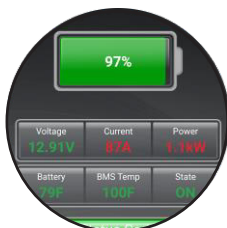
Ampseal I/O Features	Advanced (23-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	✓
Automatic Generator Start/Restart (AGSR)	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)	✓
BMS Auxiliary Power Input (AC Sense)	✓
High Voltage Charger Interlock	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	✓
Alarm Circuit	✓
Battery Percent (0-5V Signal)	✓
Emergency Stop Input (E-Stop Circuit)	✓

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DUAL CHANNEL NEVERDIE® ACCESSORIES



▶ Independent Charge Channel



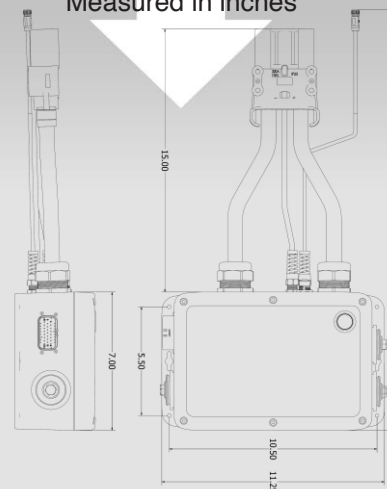
▶ Bluetooth® Transmitter



▶ Round SOC Display

DIMENSIONS

11.25 X 4.06 X 22.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:

AP037 SERIES - ADVANCED PLUG & PLAY (300A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS

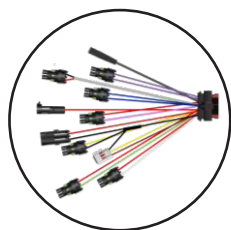


NeverDie® BMS Features	Advanced Series (12V to 96V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	✓
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Order Option
BMS Data Telemetry – Ethernet TCP/IP	Optional
Dual Channel (Independent Charge/Discharge Channels)	
Redundant Coil-Driven Contactor	Optional
Internal Pre-Charge Circuit (Programmable)	Optional for 48V to 96V

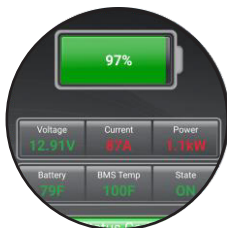
Ampseal I/O Features	Advanced (23-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	✓
Automatic Generator Start/Restart (AGSR)	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)	✓
BMS Auxiliary Power Input (AC Sense)	✓
High Voltage Charger Interlock	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	✓
Alarm Circuit	✓
Battery Percent (0-5V Signal)	✓
Emergency Stop Input (E-Stop Circuit)	✓

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ADVANCED NEVERDIE® ACCESSORIES



▶ Ampseal I/O Connector



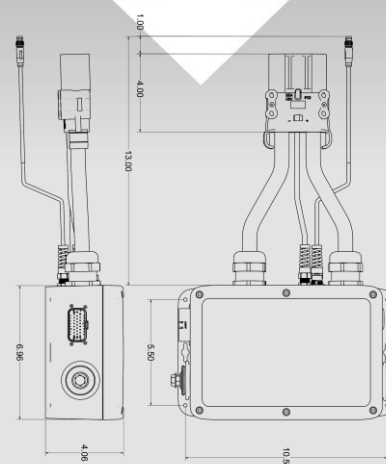
▶ Bluetooth® Transmitter



▶ Round SOC Display

DIMENSIONS

11.25 X 4.06 X 22.00
Measured in inches



LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:

AP037 SERIES – DUAL CHANNEL (300A CONTINUOUS RATING)

NEVERDIE®
EXTERNAL BMS



NeverDie® BMS Features	Dual Channel Series (12V to 51V)
OptoLoop® Cell Monitoring	✓
MiniBMS® Cell Balancing	✓
NeverDie Reserve (Reset/Power Switch)	✓
Low-Voltage Cutoff Protection (Over-Discharge)	✓
High-Voltage Cutoff Protection (Over-Charge)	✓
Short Circuit Protection	✓
Current Direction Based Temperature Intervention Sensor	✓
UL Approved Fully Redundant Protective Safety Circuits	✓
Military Grade Latching Contactor with Aux Contact Monitoring	✓
Coulomb Based State-of-Charge Meter	✓
Programmable NeverDie Reserve & AGSR	✓
State of Health Monitoring (Status & Fault Codes)	✓
BMS Data Telemetry – CANBus	✓
BMS Data Telemetry – Bluetooth or Serial Port	Order Option
BMS Data Telemetry – Ethernet TCP/IP	Optional
Dual Channel (Independent Charge/Discharge Channels)	✓
Redundant Coil-Driven Contactor	
Internal Pre-Charge Circuit (Programmable)	

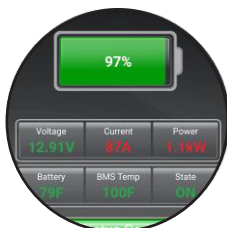
Ampseal I/O Features	Advanced (23-Pin)
Alternator Field Control Circuit (FCC)	✓
CANBus (Supports RV-C BMS Data & NCC Charger Series)	✓
Remote Power Switch	✓
Serial UART BMS Data Telemetry (Alternate: Serial RS232)	✓
Automatic Generator Start/Restart (AGSR)	✓
External Pre-Charge Circuit Control (Alternate: Heater Power)	✓
BMS Auxiliary Power Input (AC Sense)	✓
High Voltage Charger Interlock	✓
Tri-Color LED Pod (Alternate: LED for Remote Reset Switch)	✓
Alarm Circuit	✓
Battery Percent (0-5V Signal)	✓
Emergency Stop Input (E-Stop Circuit)	✓

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DUAL CHANNEL NEVERDIE® ACCESSORIES



Independent Charge Channel



Bluetooth® Transmitter



Round SOC Display

DIMENSIONS

11.25 X 4.06 X 22.00
Measured in inches

