

# DPP/3DPP

Lithium Compatible UPS

LITHIUM IRON PHOSPHATE BATTERIES



**AMETEK®**

**SOLIDSTATE CONTROLS**  
PROVIDING CONTINUITY OF ELECTRICAL POWER

# DPP/3DPP

## LITHIUM COMPATIBLE

### Uninterruptible Power Supply System

DPP SINGLE PHASE: 5-100 KVA

3DPP THREE PHASE: 10-160 KVA

AMETEK Solidstate Controls has a new Lithium Iron Phosphate solution. This system has the same robust reliability you trust but now you have a choice to use Lead-Acid or Lithium Iron Phosphate batteries for your industrial applications.

#### SAME MAXIMUM PERFORMANCE

- True on-line, double conversion UPS
- Provides continuous, clean, regulated power for critical loads
- Fiber optic cables used for better control and communication
- High Power IGBT semiconductors and digital control
- Large, full color LCD touchscreen display

LITHIUM  
COMPATIBLE



# Lithium Compatible UPS Specifications

Output Rated kVA <sup>1</sup>								
120 VDC	5 <sup>2</sup>	7.5 <sup>2</sup>	10	15	20	30	40	50
240 VDC	30	40	50	60	80	100	125 <sup>3</sup>	160 <sup>3</sup>

Performance			
Battery Charger/Rectifier			
AC Input			
Nominal Voltage <sup>4</sup>	208, 380, 415, 480, 600 VAC (3Ø)		
Input Range	± 10% (- 15% without discharging)		
Frequency	50 or 60 Hz ± 5%		
DC Output			
DC Bus Voltage(s)	110, 120, 240 VDC		
Regulation	± 1%		
Ripple Voltage	< 2% with battery connected		
Capacity	Sized to recharge a 30 minute battery to 95% of its rated capacity within 8 hours, while simultaneously supplying power to a fully loaded inverter		
Float	± 5% Adjustability		
Inverter			
DC Input			
Nominal Voltage Range	110 V/55 (99-135 VDC) 120 V/60 (105-140 VDC) 240 V/120 (210-280 VDC)		
AC Output			
Single Phase Ratings	5-100 kVA		
Three Phase kVA Ratings	10-160 kVA		
Power Factor	0.8 or 1.0		
Single Phase Three Phase	120, 220, 240 VAC 120/208, 220/380, 277/480 VAC <sup>4</sup>		
Regulation	± 1 %		
Voltage Adjustment	± 5 %		
Frequency	50 or 60 Hz; + 0.1%		
Crest Factor	3:1		
Total Harmonic Distortion (THD)	100% linear load < 3% 100% non-linear load < 5%		
Transient Response	± 5% (0-100% load)		
Recovery Time	< 50 millisecond to ± 1%		
Inverter Overload Capacity	100% - continuous	125% - 10 minutes	150% - 1 minute
Mechanical			
Cooling	Aided Convection or Forced Air, depending on kVA rating and design (fans standard for 40 kVA units and above)		
Cable Entry	Top or Bottom Entry Standard		
Cabinet Rating	NEMA 1 / IP-20 (IP-21 with addition optional drip shield)		
Environmental			
Ambient Temperature	23 to 104°F (-5 to 40°C)		
Relative Humidity	0-95% non-condensing		
Operating Altitude	10,000 feet (3,048 meters)		
Audible Noise <sup>5</sup>	65-72 dB(A) @ 4.9 feet (1.5 meter) typical		
Mean Time Between Failure (MTBF)	> 205,000 Hours		
Dimensions	Varies based on ratings and options. Compact Slimmer DPP option also available <sup>4</sup>		



# Lithium Compatible UPS Specifications

**FOR OUR STANDARD FEATURES, VISIT OUR WEBSITE  
OR CONTACT YOUR SALES REPRESENTATIVE.**

Optional Features		
Metering and System Measurements		
AC Input Power (Voltage, Frequency, Current) Bypass Input Frequency Bypass Input Voltage	Output Power (kVA, kW, Power Factor) % Inverter Loading Inverter Output Voltage	BMS Values
Circuit Breaker		
65 kAIC AC Input and Bypass Input Inverter Output (Non-Automatic)	AC Output Battery High Interrupt Breaker	
Miscellaneous		
Charger Output Ripple Filter Latching Alarms Lamp Test ESI (Essential Status Indicator) Panel Alarm Test Precharge Circuit Emergency Power Off Custom Cabinet Color 20% Spare Terminals	Drip Shield Lifting Eye Bolts Padlockable Circuit Breakers PCB Conformal Coating Fungus and Moisture Proof (voids UL) 12 Pulse Charger (10% Reflected Harmonics) Remote External MBS	
Alarms (LCD)		
Charger Overload High DC Disconnect Positive/Negative to Ground (2 relays) High/Low Bypass Source Voltage High/Low AC Output Voltage AC Power Failure AC Output Overload High/Low Inverter Output Voltage Out-of-Sync Inverter Fuse Blown Inverter Off Frequency Low SOC/Low SOC Disconnect BMS Loss of Communication	Bypass Off Frequency Rectifier/Charger Fuse Blown Battery Near Exhaustion Low AC Input Voltage High DC Voltage MBS to Bypass AC Input CB Open Bypass Input CB Open AC Output CB Open High AC Input Voltage Inverter Output CB Open Battery Fault Battery Temperature High	
Communications		
Modbus RTU (RS485 Connection) Ethernet Webpage	Modbus TCP Consult Us for Additional Communications Options	
LED Indicators		
UPS Normal UPS Trouble Float Voltage	Inverter Supplying Load Bypass Supplying Load	
Some standard alarms displayed on the LCD Alarm Panel have the option for LEDs and Relay Indicators <sup>6</sup> - Contact Us		
Applicable Standards, Codes and Regulations		
CE Marking <sup>7</sup> ANSI/NFPA 70 UL/C-UL (UL1778) Unit Manufactured in ISO9001 Certified Facility	NEMA PE-1 ANSI IEEE	

<sup>1</sup>At 0.8 Load Power Factor. 1.0 Load Power Factor Available - Consult Us.

<sup>2</sup>Single Phase Only

<sup>3</sup>Three Phase Only

<sup>4</sup>Custom Input and Output Voltages Available - Consult Us

<sup>5</sup>Addition of drip shield may increase the noise by 1-3 db(A)

<sup>6</sup>Allowance of additional LED Indicators is 1 green and 9 red and a max of 13 Relays

<sup>7</sup>CE Marking available upon request for Single Phase 5 - 40 kVA and Three Phase 10 - 80 kVA

## WORLD HEADQUARTERS

875 Dearborn Drive  
Columbus, Ohio 43085  
Phone: +1-614-846-7500  
Toll Free: +1-800-635-7300  
Fax: +1-614-885-3990

## GLOBAL OFFICES LOCATED IN

Mexico Middle East  
Asia Pacific India  
Brazil Argentina  
Canada

## WEBSITE

[www.solidstatecontrolsinc.com](http://www.solidstatecontrolsinc.com)

## EMAIL

[SCI.sales@AMETEK.com](mailto:SCI.sales@AMETEK.com)



# AMETEK<sup>®</sup>

## SOLIDSTATE CONTROLS

REV 09/2023

**THE PURPOSE OF OUR BUSINESS IS TO PROVIDE CONTINUITY  
OF ELECTRICAL POWER TO KEEP BUSINESSES IN BUSINESS.**

**WE DO THIS BY HELPING CLIENTS SOLVE THEIR POWER PROBLEMS  
AND BY CREATING THE MOST ECONOMICAL LONG-TERM RESULTS.**