

Uninterruptible Power Supply (UPS) for 24 Volt Industrial Control Applications

QUPS offers Lithium Ion Batteries for superior performance at a value price!

Pictured: BP2-24-120 240Wh



Typically used when:

- An orderly control system shutdown is preferred
- Shutdown data needs to be logged
- A power fail message needs to be transmitted
- Continuous data must be logged and/or transmitted
- Power is unreliable and interruptions are frequent

Features and Benefits

- Lithium Ion vs. Conventional Lead Acid Batteries

1/3 Size and Weight

3x Life

(7-10 years)

4x Life Cycles

(2,000 - 3,000 charge/discharge cycles)

100% Depth of Discharge

(vs. only 50% for lead acid)

Does not require vented enclosure

(Lead acid does)

- BMS (Battery Management System) for optimized charging/discharging and safety protection circuits

8 Layers of Safety

1. Overcurrent Protection
2. Short Circuit Protection
3. Over Temperature Protection
4. Under Temperature Protection
5. Over Charging Protection
6. Over Discharging Protection
7. Overload Protection
8. Sleep Mode for shipping and long shelf life

Q-UPS Sizes

Small (BP1)

- 30Wh of 24VDC energy supporting loads up to 15 Watts (2 hours backup power)
- DIN Rail Mounted

Large (BP2)

- 240Wh of 24VDC energy supporting loads up to 120 Watts (2 hours backup power)
- DIN Rail or Panel Mounted

Call Quantum Automation at (714) 854-0800 to discuss Solar Panel Sizing for your specific needs!

Quantum Automation offers a complete line of panel fabrication product including enclosures!

Visit Quantumautomation.com and see our [Best Value Guide](#) for more information!

Specifications

	Performance Specifications	General Parameters (BP1 / BP2)	Comments (BP1 / BP2)
Electrical Characteristics	Input	24VDC (60W / 240W)	4 Hour / 6 Hour Recharge Time
	Output Ripple Voltage	<200mVp-p	
	Rated Energy Capacity	30Wh / 240Wh	
	Output Power Max.	15W/ 120W	
	Surge Capacity	2x Current for 250ms	1.25 Amps / 10 Amps
	Months Self Discharge	≤3.5% per month	
	Cycle Life	>2000 cycles	100% DOD
	Sleep Mode	Sleep Mode is active when output power < 2W for 30+ minutes and no input power present. Connect 24VDC to activate battery.	Sleep mode is used for transportation purposes and will not be active as long as 24VDC is connected to battery.
Input Specifications	Power loss switch-over time	100Ms	
	Input Voltage Range	12 to 26 VDC / 20 to 26 VDC	
	Recharge Energy Max.	5W / 60W	
Charge Specifications	Cell Chemistry	Lithium Iron Phosphate	
Environmental	Charge Temperature	0 to 45°C (32 to 113°F)	
	Discharge Temperature	-20 to 65°C (-4 to 149°F)	
	Storage Temperature	0 to 45°C (32 to 113°F)	@60 ± 25% Relative Humidity
Mechanical	Dimensions (Width, Height, Depth)	(4"x4"x 2" / 9"x7"x3")102mm x 102mm x 51mm / 229mm x 178mm x 76mm	
	Case Material	Plastic/Metal	
	Weight	1Lb / 6Lb 0.45 Kg / 2.8 Kg	
	Connections	Wire Lead (30 inches, 762mm)	18 AWG / 16 AWG

Certifications

- UL1642

Order Information

Max. Continuous 24 VDC Load	Battery Capacity (Wh)	Battery Run Time	Recommended Power Supply for 6 Hours Recharge	24 VDC Input from Existing Power Supply	24 VDC Input from QA Power Supply	Size	Quantum Part Number
15 Watts / 0.63 Amps	30Wh	120 Minutes	20 Watts	X		Small (BP1)	BP1-24-15
15 Watts / 0.63 Amps	30Wh	120 Minutes	60 Watts		X	Small (BP1) + QA PS	BP1-24-15-P60
120 Watts / 5 Amps	240Wh	120 Minutes	240 Watts*	X		Large (BP2)	BP2-24-120
120 Watts / 5 Amps	240Wh	120 Minutes	240 Watts*		X	Large (BP2) + QA PS	BP2-24-120-P240

* Can use two 120 Watt power supplies. One for load and one for re-charging

Double Capacity (480Wh) batteries available upon request.

Highlighted Rows Require Customer Supplied 24 VDC Power Supply. Otherwise power supply included in QA Price.