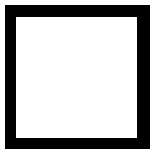


LinkPower™ UPS1048V2 Pro LFP12 Series

Outdoor 48V DC Uninterrupted Power Supply

The LinkPower™ UPS1048V2 Pro LFP12 is a rugged outdoor 48V DC uninterruptible power supply designed to provide reliable backup power for critical network equipment.

Equipped with four 12V, 12Ah LFP batteries, it delivers uninterrupted power during AC outages and features adjustable charging current up to 1.5A with enhanced battery protection.



Scan the QR code for more details
about the UPS1048V2 product line



AVAILABLE MODELS

UPS1048V2 Pro LFP12

Outdoor 48V DC UPS with 12Ah LFP battery bank

UPS1048MV2 Pro LFP12

Managed outdoor 48V DC UPS with 12Ah LFP battery bank

ⓘ Detailed monitoring and communications features for the managed model should be listed in conjunction with the UPMS2000 specifications

Key Product Features

Intelligent Battery Backup System

- Integrated 48V DC rectifier and backup controller
- Seamless transfer to battery during AC outages
- Automatic return to AC power when restored

12Ah AGM Battery Bank

- Four 12V, 12Ah LFP batteries in series
- 48V nominal battery bank
- 576Wh nominal stored energy

Adjustable DC Output

- Adjustable from 46V to 58.4V
- Supports compatible 48V DC equipment
- Configurable for system requirements

Faster Battery Charging

- Adjustable charging current from 0.5A to 1.5A
- Up to 3× faster than the previous generation
- Independent intelligent charging path

Enhanced Protection

- Overload, over-voltage, and short-circuit protection
- Reverse-connection and over-temperature protection
- Deep-discharge cutoff below 46V

Outdoor-Ready Design

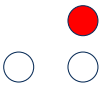
- Rugged outdoor enclosure
- Lockable hinged cover
- Ideal for surveillance, wireless, and access-control systems

Technical Specifications

SECTION	PARAMETER	SPECIFICATION
INPUT	Voltage Range	90–264VAC, automatic wide-range input
	Frequency Range	47–63Hz
	Input Current	6.0A maximum
OUTPUT	Nominal Voltage	52VDC
	Adjustable DC Voltage	46V~58.4V
	Battery Operation	Automatic battery backup when AC power fails
	Rated Current	5.0A
	Rated Power (Max.)	260W maximum
	Efficiency (Typ.)	>91% at rated load
	Ripple & Noise	<1% Vpp at full load
	Output Channels	Two channels with an independent intelligent battery-charging path
BATTERIES	Battery Configuration	Four 12V, 12Ah LFP batteries in series
	Nominal Battery Voltage	48VDC
	Nominal Stored Energy	576Wh
	Battery Chemistry Selection	AGM & LFP selection switch
CHARGING	Charging Profile	Selectable AGM and LFP charging modes
	Charging Current	Adjustable 0.5A–1.5A
	Charging Status Indication	Red LED—charging; Green LED—fully charged
PROTECTION	Overload Protection	Automatic restart after overload condition is removed
	Over-Voltage Protection	Output shuts down when voltage exceeds configured threshold
	Short-Circuit Protection	Automatic recovery after fault condition is removed
	Deep-Discharge Protection	Automatically disconnects battery output when battery voltage drops below 46V
	Over-Temperature Protection	Sensor-based shutdown protection
	Battery Reverse Connection	Fuse and diode protection
ENVIRONMENT	Operating Temperature	–25°C to 60°C
	Storage Temperature	–40°C to 80°C
	Operating Humidity	20%–90% RH
	Storage Humidity	10%–95% RH
SAFETY & EMC	EMC Standards	EN 55022:2010, EN 55024:2010, EN 61000-3-2:2014, EN 61000-3-3:2013
	Low-Voltage Standards	EN 60950-1:2006 and applicable amendments
	Compliance	FCC, RoHS
WARRANTY	System Warranty	Three-year limited warranty on electronics, parts, and labor
	Battery Warranty	Battery manufacturer's warranty

LED INDICATORS


Batteries connected
before AC connection


Batteries connected,
AC connected, wire
distribution board OFF


Batteries connected,
AC connected, wire
distribution board ON


Batteries connected,
AC input failure, wire
distribution board ON,


Batteries disconnected,
AC connected, wire
distribution board ON

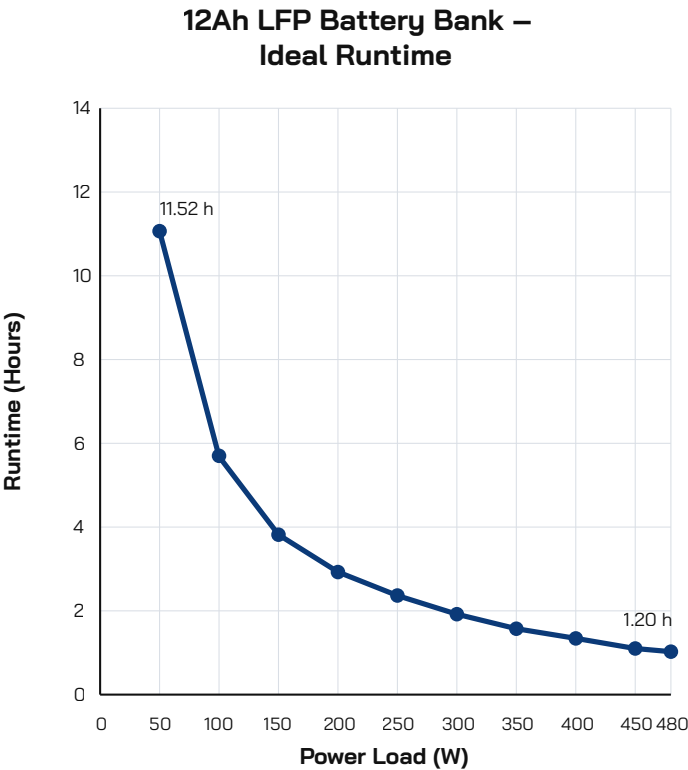
Battery Runtime Estimates LFP 12Ah

12Ah LFP Battery Bank (48V Nominal)

Nominal stored energy: 576Wh

Theoretical runtime based on ideal conditions. Actual runtime will vary depending on load, temperature, battery age, efficiency and other factors.

Connected Load	Ideal Runtime	Approx. Minutes
(W)	(Hours)	(Minutes)
50	11.52	691
100	5.76	346
150	3.84	230
200	2.88	173
250	2.30	138
300	1.92	115
350	1.65	99
400	1.44	86
450	1.28	77
480	1.20	72



Calculation: $\text{Runtime} = \frac{48\text{V} \times 12\text{Ah}}{\text{Load (W)}}$

Runtime declines as load increases

LiFePO4 12Ah Battery Dimensions: 151 x 98 x 95mm

BMS - BMS is explicitly approved for four complete 12.8V modules in series

Four batteries in series produce a 51.2V nominal bank while retaining the single-battery Ah rating



INTERPRETATION AND LIMITATIONS

Actual backup time is normally lower than the ideal values shown. Relevant factors include UPS or inverter efficiency, battery-management-system limits, state of charge, temperature, cable losses, and the UPS low-voltage cutoff. LFP systems also require a compatible charging profile. This report intentionally retains the 48 V comparison basis; four 12.8 V nominal modules form a 51.2 V bank with approximately 6.7% more ideal energy before losses. Verify the installed battery and UPS specifications and confirm runtime with a controlled load test.

Enclosure and Package Contents



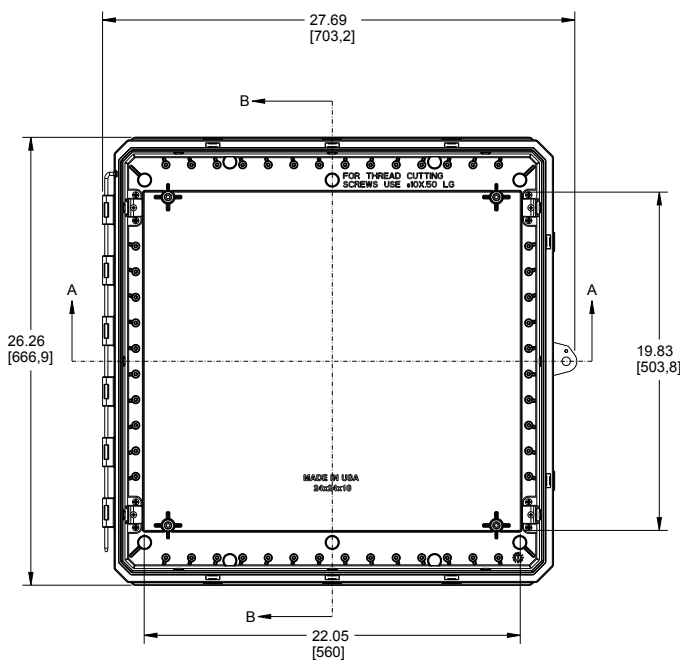
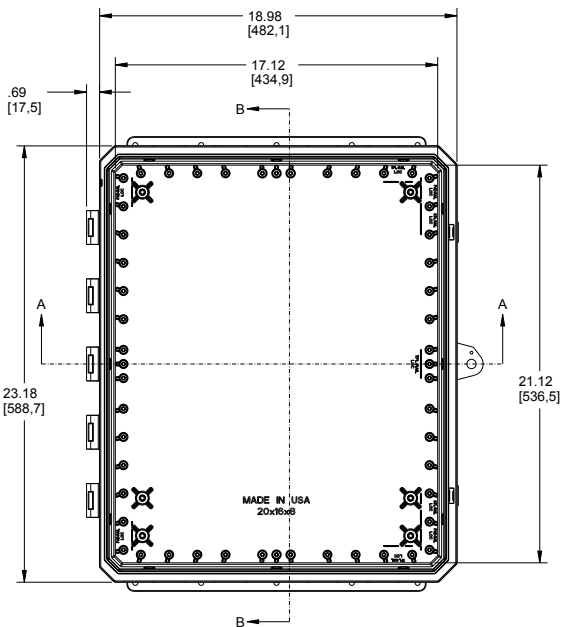
Wire Distribution Box



Rectifier



UPMS2000 - UPS Management System
Included with UPS1048MV2 LFP12



Item	Specification
External Dimensions (H x W x D)	21 x 17 x 9 in or 24 x 24x 10
Usable Internal Depth	7.41 in or 9.54 in
Enclosure Material	High-impact polycarbonate
Cover	Hinged cover with locking latches
Mounting	Wall mounts included and pole mounting (sold separately)

Package Contents

- UPS1048V2 Pro LFP12 (1)
- UPMS2000 Power Management System (Optional)
- WECK0003 Waterproof Ethernet Connector Kit (1)
- WPCK0003 Waterproof Power Cord Kit (1)
- Wall Mount Kit WM0001 (1)
- User Manual (1)
- Warranty Sheet (1)
- MMK0001-XL Pole Mount Kit (1) (Sold Separately)



Product Information Online: www.inscapedata.com

Corporate Headquarters
2012 Hartog Dr, San Jose, CA, 95131, U.S.A.
PHONE +1.408.392.9800 FAX +1.408.392.9812 EMAIL sales@inscapedata.com
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