CUPS

Online UPS - Compact 2U

Shown above: CUPS-1K-IEC-24V-A1

Shown above: CUPS-1K-IEC-24V-A1
(Rear Panel)

(Also, Available with LiFePo4 Battery Pack)

For Custom Systems, Consult Factory

La Marche's Compact 2U (CUPS) is an online double-conversion UPS system which provides consistent and clean AC power, in addition to reliable transfer between sources, which makes it suitable to power up critical loads in demanding power applications.

The CUPS output can be configured to operate critical and non-critical loads through different outlets. This feature and the capability to connect multiple battery packs provide the user the flexibility to accommodate different type loads, size and backup requirements.

This UPS system offer an ECO mode operation which improves its efficiency by up to 96% while maintaining safe operation of the loads. The static transfer switch within the CUPS provides uninterruptible transfer to the alternate bypass source.

Standard Features

- True Double-Conversion Topology
- Built-in Automatic Bypass Ensures Seamless Power to the Load
- Frequency Convert Mode
- Programmable Load Share
- Hot Swappable Battery Design
- ECO Mode for Energy Saving
- Output Power factor 1.0
- Output Voltage Regulation <1%
- Automatic Restart After Short Circuit
- Surge Protection
- SNMP Card
- Complies with UL1778
- 2 Years Warranty

Applications

- Mission Critical Load
- Data Center
- Networking
- IP Telephone Services
- Enterprise Server

Specifications subject to change without notice

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P25-DSCUPS-2
ECN 23443
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CUPS with Internal & External Battery Pack

The La Marche CUPS battery packs provide modularity to scale based on the backup time requirement. This single external battery pack, provides up to 2.5 times longer runtime for critical systems. The modules are configured with maintenance free VRLA batteries.

Shown above:
CUPS-1K- with External Battery Pack (Rack Mounted)

Back Up Time Using Internal Battery Pack

Model	CUPS-1kVA	CUPS-2kVA	CUPS-3kVA
Battery / Load	24V/9Ah	48V/9Ah	72V/9Ah
100.00%	8	8	7
80.00%	10	10	9
60.00%	14	14	13

(In Min)

Shown above:
CUPS-1K- with Internal Battery Pack

Back Up Time Using External Battery Packs

UPS Model	CUPS-1kVA			CUPS-2kVA			CUPS-3kVA		
Suitable Battery Model	CUPS-BATT-24V-1			CUPS-BATT-48V-1			CUPS-BATT-72V-1		
Battery Pack / Load	1	2	3	1	2	3	1	2	3
100.00%	20	40	56	20	40	56	21	35	49
80.00%	30	50	70	30	50	70	27	45	63
60.00%	42	70	98	42	70	98	39	65	91

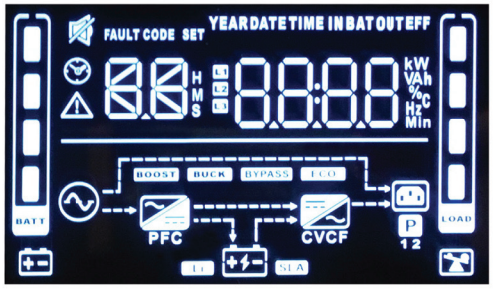
(In Min)

Shown above:
CUPS-2KVA- with Six CUPS-48V Battery Packs

Battery Specification

Model	CUPS-BATT-24V-1	CUPS-BATT-48V-1	CUPS-BATT-72V-1
Applicable UPS Models	CUPS-1kVA Model	CUPS-2kVA Model	CUPS-3kVA Model
Battery Type	24V/18Ah	48V/18Ah	72V/18Ah
Battery Numbers	12V/9Ah*2/2 (total:4)	12V/9Ah*4/4 (total:8)	12V/9Ah*6/6 (total:12)
Dimensions (WxDxH) in	17.24 x 11.02 x 3.46	17.24 x 18.89 x 3.46	17.24 x 23.62 x 3.46
Weight(lbs)	33	64	91

LED Display Information



- Input, Output, Battery, Temperature and Load
- Load Information
- Programmable Outlets
- Backup Time
- Fault Code
- Battery Information
- Mode Operation

Tower Mount

Shown above: CUPS-1KVA (Tower Mount)

The CUPS can also be Tower mounted, it can be placed on the floor or desk at required application.

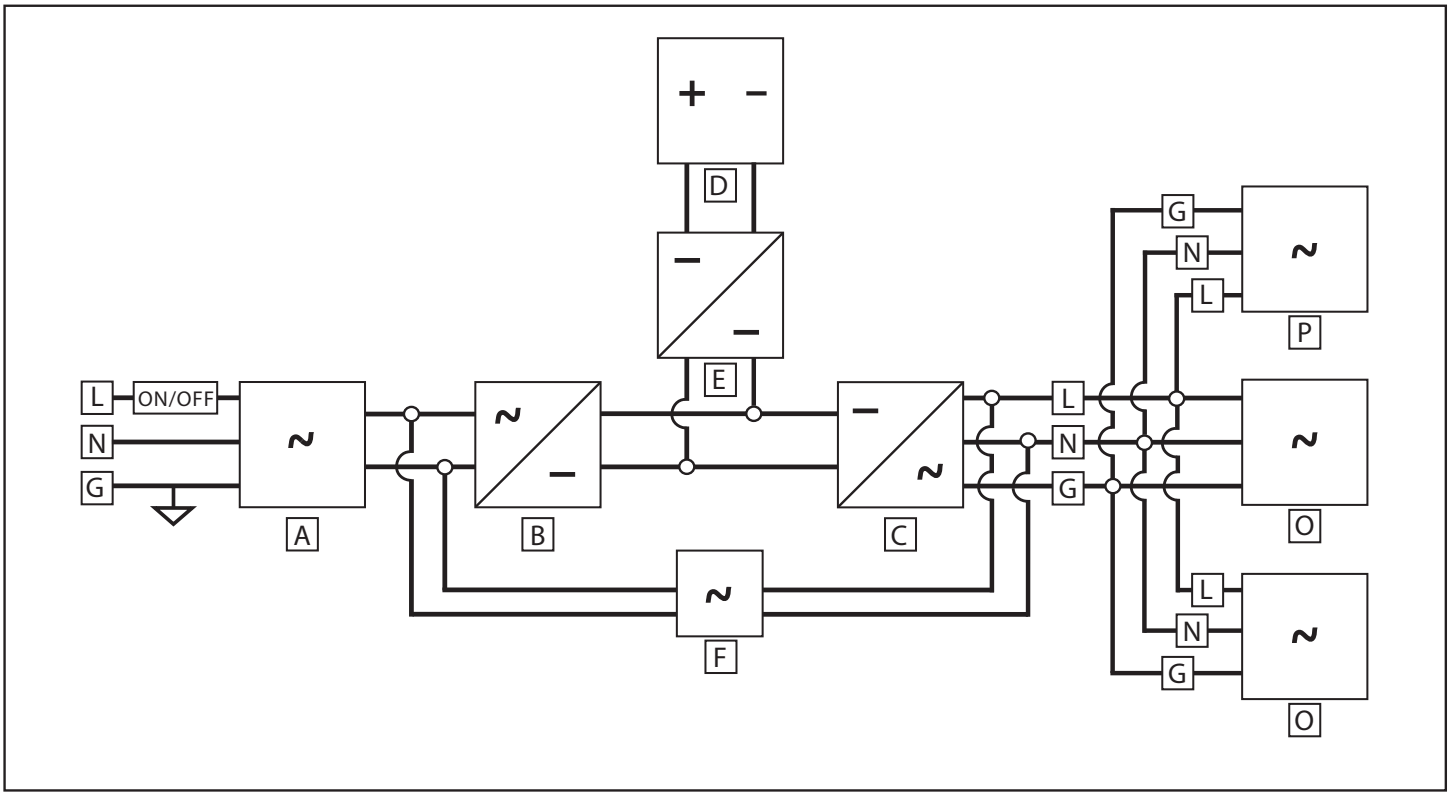
UPS Network Management (Software Package Included)

Connect to SNMP intelligent slot and have a secure connection.
La Marche's network management card is able to establish direct and secure control of the UPS via LAN or Internet. ViewPower Management software with a protected network provides monitoring and management of the local UPS.

Applications

- Monitor and manage the local UPS connected to local computer
- Monitor and manage other UPSs (with software installed) in LAN
- Remote monitor and manage other UPSs via INTERNET from remote PC (with software installed)

Block Diagram & Description



Item	Component	Function
A	Input	Input having surge protection circuit, protects device by eliminating possible electromagnetic interference (EMI) and radio frequency interference (RFI) available in power supply.
B	Rectifier	Rectifier converts input AC power to regulated DC power. Available Power Factor Correction (PFC) circuit helps to improve power factor and hence power quality, utilizing capacitors to offset unusually inductive loads.
C	Inverter	Inverter converts DC power to regulated sine-wave AC power by using high frequency switches. Transformer connected to inverter helps to get pure sine wave.
D	Batteries	Lithium-ion Battery or Sealed Lead-Acid Battery.
E	DC-DC Converter	Lower the DC voltage of the PFC circuit to battery rated voltage, helps to charge battery during supply available. Bi-directional DC-DC convertor, rise the DC voltage from the battery to the operating voltage for invertors during failure of AC power at input.
F	Static Switch	In case of failure of the rectifier or inverter, this will automatically transfer all connected loads to the bypass.
P	Output	Output receptacles to connect mission-critical loads.
O	Output	Output receptacles to connect non-critical loads.

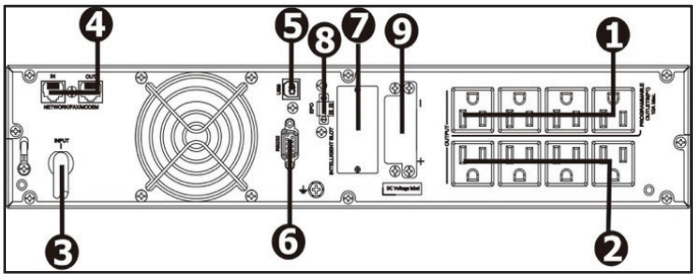
Specifications

MODEL	CUPS-1kVA	CUPS-2kVA	CUPS-3kVA
CAPACITY*	1000VA/1000W	2000VA/2000W	3000VA / 3000W
INPUT			
Voltage Range	55-150 VAC (For 120V Model) or 110-300VAC (For 230V Model)		
Frequency Range	40Hz ~ 70 Hz		
Phase	Single phase with ground		
Power Factor	0.99 @ full load		
OUTPUT			
Output voltage	100/110/115/120/125 VAC or 200/208/220/230/240VAC		
AC Voltage Regulation	± 1% (Batt. Mode)		
Frequency Range (Synchronized Range)	47 ~ 53 Hz or 57 ~ 63 Hz		
Frequency Range	50 Hz ± 0.1 Hz or 60Hz ±0.1 Hz (Batt. Mode)		
Current Crest Ratio	3:1		
Harmonic Distortion	2 % THD (Linear Load); 4 % THD-(Non linear Load)		
Transfer Time: AC Mode to Batt. Mode	Zero		
Transfer Time: Inverter to Bypass	< 4 mS		
Waveform (Batt. Mode)	Pure Sinewave		
EFFICIENCY			
AC Mode	89%	91%	
ECO Mode	96%		
Battery Mode	88%	90%	
BATTERY**			
Battery Type	12V/9AH	12V/9AH	12V/9AH
Numbers	2	4	6
Recharge Time	3 hours recover to 95% capacity for internal battery@ 2A charging current		
Charging Current	Default: 2A, Max: 8A adjustable		
Charging Voltage	27.4 VDC ± 1%	54.7 VDC ± 1%	82.1 VDC ±1%
PHYSICAL			
Dimensions, WxDxH (in)	17.24 x 16.14 x 3.46	17.24 x 20.07 x 3.46	17.24 x 24.80 x 3.46
Net Weight (lbs)	25.57	43	60.62
ENVIRONMENT			
Operation Humidity	20-95 % RH @ 0-40°C (non-condensing)		
Noise Level	Less than 50dBA @ 1 Meter (With fan speed control)		
MANAGEMENT			
Smart RS-232- or USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix and MAC		
SNMP	Power management from SNMP manager and web browser		
Standard	cTUVus (Complies with UL1778), Fcc (1-1.5K Class B, 2-3K Class A)		

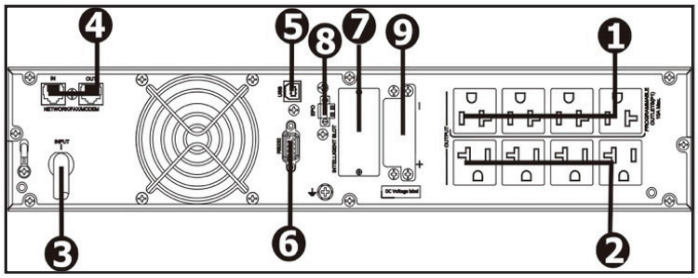
* Derate capacity to 90% when the output voltage is adjusted to 100VAC (For 120V Model) and 200VAC or 208VAC (For 230V Model).
Product specifications are subject to change without further notice.
** Only for units with internal batteries.

Rear Panel View

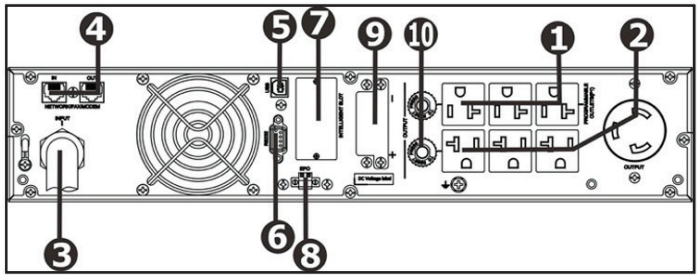
CUPS-1kVA-120VAC



CUPS-2kVA-120VAC



CUPS-3kVA-120VAC



1. Programmable outlets: connect to non-critical loads.
2. Output receptacles: connect to mission-critical loads.
3. AC input
4. Network/Fax/Modem surge protection
5. USB communication port
6. RS-232 communication port
7. SNMP intelligent slot
8. Emergency power off function connector (EPO)
9. External battery connection
10. Output circuit breaker

Model Number Nomenclature

CUPS - 1K - IEC - 24V - A1-B

- CUPS: Model Number
- 1K: Power Rating
- IEC: Output Plug Type
- 24V: DC Bus Voltage
- A1: Input/Output Voltage
- B: Internal Battery

Power Rating	Output Plug Type	Input/Output Voltage	DC Bus Voltage	Internal Battery
1kVA	IEC	A1 - 120VAC	24V	B - Internal Battery
2kVA	NEMA	B1 - 230VAC	48V	Blank - No Internal Battery
3kVA			72V	

Battery Pack

CUPS - BATT - 48V - 1

- CUPS: Model Number
- BATT: Battery Pack
- 48V: DC Bus Voltage

DC Bus Voltage

24V, 48V and 72V