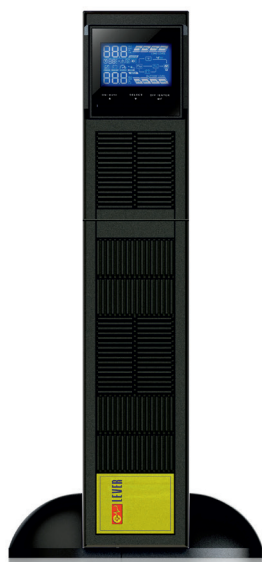


ECR1000 UPS ONLINE

1 kVA - 10 kVA
Rack/Tower Convertible



ONLINE



- True double-conversion online UPS
- Wide input voltage range (110-300 VAC)
- Input power factor correction 0.99
- Output power factor 0.9
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- ECO mode operation for energy saving (ECO)
- SNMP+USB+RS-232 multiple communications
- Smart battery charger design for optimized battery performance
- Selectable output voltage via LCD panel

Compact and Reliable Power Protection for:

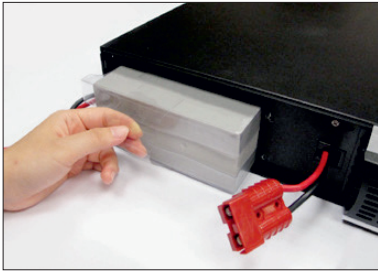
- Servers, IT and network equipment
- Office telecommunication and security systems
- Medical, diagnostic and test devices
- Bank and Finance applications
- Chemical and Manufacturing process
- Auxiliary and Emergency care systems

Advanced Technology and Optimal Power Performances

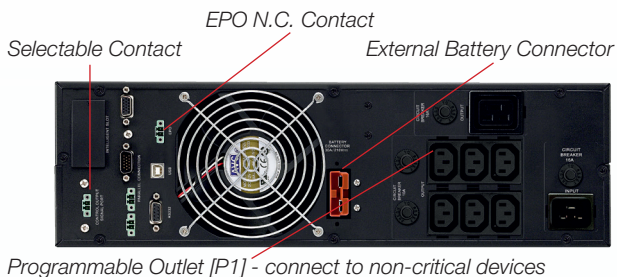
A true double conversion UPS will provide clean, high level quality power to fully protect mission-critical devices. The DSP controller provides an improved and cost-effective solution with highest performance. ECR1000 Series is designed in true universal-mount case. It can be easily installed as floor-standing tower or in 19-inch rackmount bracket. All the accessories for both fittings are supplied in the packaging. **ECR1000 is a excellent density UPS** with output power factor 0,9 to provide higher performance and efficiency to critical applications. **The wide input voltage range (110V-300V)** assures power supply to connected devices under extremely unstable network, protecting the batteries life. ECR1000 is input low impact with almost unitary power factor and negligible harmonic distortion, fully generator compatible without power oversizing. All models have the back-feed protection and **Emergency Power Off (EPO)** input to secure the personnel and equipment in case of emergency cases. With **programmable power management outlets**, users can easily and independently control loads segments. During power failure, this feature enables users to extend battery time to mission-critical devices shutting down the non-critical loads. ECR1000 is fit out with various outlets types (IEC, Schuko, NEMA, etc.).

Hot-Swappable Battery Design for all models

This design ensures easy operation, clean and uninterrupted power to protected equipment during battery replacement.



ECR1000 is as standard **with internal battery and DC connector for additional battery packs** for scalable runtime; the version ECR1000SC without battery and integrated super charger for long back time. ECR1000 models are equipped with **programmable output contact** to drive remote control system.



Programmable Outlet [P1] - connect to non-critical devices

Flexible and Reliable Configurations for all needs

ECR1000 Series has selectable operation modes: **Single, N+X Parallel Redundant for 6kVA and up models, Hot Standby, Ecomode, 50/60 Hz Frequency Converter.**

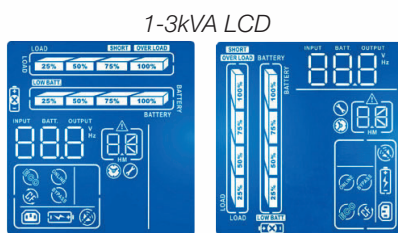
For genuinely redundant power protection, ECR1000 6-10kVA can either be used in parallel operation up to 3 units or hot standby mode. Slave UPS will back up the load in the event of critical component failure. It increase power safety and availability only adding an auxiliary cable. Setting the output frequency 50 or 60Hz as different the input will feed equipment as frequency converter. ECO mode operation offers efficiency as high as 98% to cut energy usage & cost. UPS power application via static bypass, timely returning to online double conversion when the need arises.



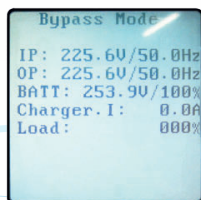
Parallel operation up to 3 UPS

User-friendly and easy - shift LCD Display

The front can be easily shifted through LCD setting to suit the installation format, vertically stand or flat wall mount.



6-10kVA LCD



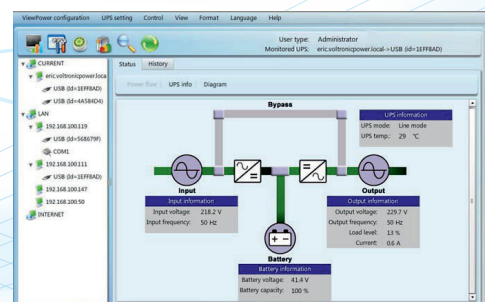
Self-Oriented Display Panel

All ECR1000 are CE and UL certified and comply with standards: IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC62040-1, IEC61040-2 and IEC60950-1; UL1778.

Monitoring Software ViewPower - UPS Management

All ECR1000 units are endowed with CD ViewPower Software and communication cable. - Allows control and monitoring of multiple UPSs via local PC, LAN or Internet

- User-friendly power analysis graphs
- Real-time dynamic graphs of UPS data
- Safely OS shutdown and protection from data loss during power failure
- Warning notifications via audible alarm, broadcast, mobile messenger and email
- Scheduled UPS on/off, battery test, programmable outlet control and audible alarm
- Password security
- Supports multiple OS and local languages



ECR1000 1 kVA / 2 kVA / 3 kVA Technical Guide

MODEL	ECR1101	ECR1101SC	ECR1102	ECR1102SC	ECR1103	ECR1103SC
CAPACITY [VA/W]	1000/900	1000/800	2000/1800	2000/1600	3000/2700	3000/2400
Nominal Voltage Voltage Range Frequency Range Power Factor	INPUT					
	200/208/220/230/240 Vac					
	110–300 Vac ± 5%					
	40 ÷ 70 Hz					
	≥ 0,99 @ Nominal Voltage (100% load)					
Selectable Voltage AC Voltage Reg. (Batt. Mode) Freq. Range (Synch. Mode) Freq. Range (Batt. Mode) Current Crest Ratio Harmonic Distortion Transfer Time AC to Batt. Mode Inverter to Bypass	OUTPUT					
	200/208/220/230/240 Vac					
	± 1%					
	47÷53 Hz or 57÷63 Hz					
	50±0.5 Hz or 60±0.5 Hz					
	5:1 (max)					
	≤ 2% THD (linear load); ≤ 8% (non-linear load)					
	0 ms					
	< 4 ms (Typical)					
	EFFICIENCY					
AC Mode	87%		90%			
Battery Mode	83%		88%			
VRLA Type Numbers Charging Current (max.) Charging Voltage	BATTERY					
	12V / 9Ah	External	12V / 9Ah	External	12V / 9Ah	External
	2		4		6	
	1 A	8 A	1 A	8 A	1 A	8 A
	27.4 Vdc ± 1%		54.7 Vdc ± 1%		82.1 Vdc ± 1%	
LCD Display	INDICATORS					
	Load level, Battery level, AC mode, Battery mode, Bypass mode, Fault indicator					
Battery Mode Low Battery Overload Fault	ALARMS					
	Sounding every 4 seconds					
	Sounding every second					
	Sounding twice every second					
	Continuously sounding					
Dimensions (WxDxH) Weight (kgs) Noise level Environment Interface port	GENERAL					
	438 x 380 x 88 [2U]		438 x 480 x 88 [2U]		438 x 600 x 88 [2U]	
	13	9	21	11	28	14
	< 50dB @ 1m					
	Temperature 0÷40°C ; Humidity <90%					
USB and RS232; EPO; Intellislot for optional SNMP, AS400, ModBus cards						

* Product specifications are subject to change without further notice.



ECR1000 6 kVA / 10 kVA Technical Guide

MODEL	ECR1106	ECR1106SC	ECR1110	ECR1110SC
CAPACITY [VA/W]	6000/5400		10000/9000	
	INPUT			
Nominal Voltage	200/208/220/230/240 Vac			
Voltage Range	110–300 Vac @ 50% load or 176–300 Vac @ 100% load			
Frequency Range	46 ÷ 64 Hz			
Power Factor	≥ 0,99 @ Nominal Voltage (100% load)			
	OUTPUT			
Selectable Voltage	200/208/220/230/240 Vac			
AC Voltage Reg. (Batt. Mode)	± 1%			
Freq. Range (Synch. Mode)	46÷54 Hz or 56÷64 Hz			
Freq. Range (Batt. Mode)	50/60 ± 0.1 Hz			
Current Crest Ratio	3:1 (max.)			
Harmonic Distortion	≤ 3% THD (linear load); ≤ 6% (non-linear load)			
Transfer Time	AC to Batt. Mode			
	0 ms			
	Inverter to Bypass			
	0 ms			
	EFFICIENCY			
AC Mode	90%			
Battery Mode	88%			
	BATTERY			
VRLA Type	External			
Numbers	20 (selectable 18-20)			
Charging Current (max.)	1A	4A	1A	4A
Charging Voltage	273 Vdc ± 1% (based on battery number at 20pcs)			
	GENERAL			
Dimensions (WxDxH)	ECR1106 unit: 438 x 580 x 133	ECR1106SC unit: 438 x 580 x 133	ECR1110 unit: 438 x 668 x 133	ECR1110SC unit: 438 x 668 x 133
Weight (kgs)	20	20	24	24
	57	-	63	-
Noise level	< 58dB @ 1m		< 60dB @ 1m	
Environment	Temperature 0÷40°C ; Humidity <90%			
Interface port	USB and RS232; Dry contact, EPO; Intellislot for optional SNMP, AS400, ModBus card			

* Product specifications are subject to change without further notice.

ECR1000 Battery Box

UPS Power [VA]	Part Number	N. Batt.	Type	Dimensions WxDxH [mm]	Weight [kgs]
1 kVA	BER2020000	0	-	438 x 380 x 88 [2U]	7
2 kVA	BER2040000	0	-	438 x 480 x 88 [2U]	9
3 kVA	BER2060000	0	-	438 x 600 x 88 [2U]	12
6 kVA / 10 kVA	BER1200000	0	-	438 x 580 x 133 [3U]	13

Note: Further battery pack configuration are available. Contact: info@lever.it

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