



LEONICS®

RANGER DISCOVERY

Easy-Mon X UPS Monitoring and Management Software



Surge Protection for Telephone Line :
Protects equipment and data against surges coming through telephone line.



Hot Swappable Battery :
User can replace the battery even when the UPS is running and without turning off the computer.



Perfect Ultra Display :
Attractive outlook with full function display for DISCOVERY model with easy control multifunction switch.



Easy-Mon X Software :
Computer can manage UPS by checking electricity status and UPS status such as utility power failure, low battery. And allow computer to shutdown UPS automatically.



Schedule Shutdown, Restart and Self-Test :
An advanced calendar helps set the time for turning the UPS on and off and also for testing the UPS when using with Easy-Mon X software. (option)



USB Connectivity :
The USB communication port for connecting the UPS to computer. For sending the information and data via USB cable and display through the Easy-Mon X Software.



Microprocessor Controlled :
New microprocessor controlled circuit for faster detection to protect your computer.



Power Watcher :
Overload warning is given both when utility line OK and utility line fail to let user be alarmed all the time.



Battery Watcher :
Automatic battery test and alert when it's time to replace the new battery.



Ultra Fast Charge :
With 3 stage battery charging, battery can be charged to 80% of its capacity in shorter time.



Intelligent Battery Management :
Charging and discharging battery management get longer backup times and prolong battery life.



25% Longer Backup Time :
With high rate battery, UPS can provide backup power longer than using normal battery for 25% that let user has longer time to save data and shutdown the computer (available in some model).



Buck/Double Boost Stabilizer :
With the efficiency of the stabilizer, it can adjust the over voltage level and under voltage level into two stages. The stabilizer is able to work well in the area that has a high under voltage level. (for DISCOVERY model)



www.leonics.com
**ISO 9001
14001**



LEONICS® RANGER / DISCOVERY :: Line Interactive UPS with Stabilizer ::



SPECIFICATIONS		RANGER 525	RANGER 650	RANGER 1050	DISCOVERY 525	DISCOVERY 650	DISCOVERY 1050	DISCOVERY 1500	
Capacity		525 VA (315 W)	650 VA (390 W)	1050 VA (630 W)	525 VA (315 W)	650 VA (390 W)	1050 VA (630 W)	1500 VA (900 W)	
INPUT									
Input voltage for utility operation		± 25% of nominal input voltage			-35% to +25% of nominal input voltage (expandable to + 30% by Easy-Mon X)				
Nominal input		220,230,240 Vac single phase, 50 or 60 Hz ± 6% (auto sensing)							
OUTPUT									
Voltage (on battery for 2 PC's load)		Modify sine wave at nominal input voltage ± 2% (± 1% Option)							
Frequency (on battery)		50 / 60 Hz ± 0.1%							
Voltage (AVR)		220 VAC ± 5%			Nominal voltage ± 10%				
Automatic voltage stabilizer		Buck / Boost			Buck / Double Boost				
Transfer time		0.5 to 4 msec.							
Overload protection		On battery - internal current limiting, On line-fuse protection		On battery - internal current limiting, On line-circuit breaker	On battery - internal current limiting, On line - fuse protection		On battery - internal current limiting, On line - circuit breaker		
SURGE PROTECTION AND FILTERING									
Surge energy rating, peak current capability		76 Joules, 4.5 kA, (346 Joules, 16 kA option)		519 Joules, 24 kA	76 Joules, 4.5 kA, (346 Joules, 16 kA option)		519 Joules, 24 kA		
Normal mode clamping response time		< 25 ns							
Normal mode noise suppression		Full time EMI / RFI filtering							
Surge energy rating for telephone line		28.5 Joules, 3.6 kA							
Surge protection for LAN line (10 Base T)		option		yes	option		yes		
ENVIRONMENTAL									
Ambient operation		0 - 95% humidity non-condensing, 0 to + 45 °C (32 to 113 °F)							
Ambient storage		0 - 95% humidity non-condensing, -10 to + 45 °C (14 to 113 °F)							
Audible noise		< 40 dBA (1 metre)							
PHYSICAL									
Input connector type		IEC 320 C 14							
Number of output outlet	Back up	3		6	3		6		
	Surge Protection	1		1	1		1		
Maximum dimensions (W x H x D)		10.0 x 16.5 x 32.0 cm. (3.9 x 6.5 x 12.6 inches)		12.5 x 21.0 x 36.5 cm. (4.9 x 8.3 x 14.4 inches)	10.0 x 16.5 x 32.0 cm. (3.9 x 6.5 x 12.6 inches)		12.5 x 21.0 x 36.5 cm. (4.9 x 8.3 x 14.4 inches)		
Net weight (approximate)		8.0 kg. (17.6 lb.)	8.5 kg. (18.7 lb.)	14.0 kg. (30.9 lb.)	8.0 kg. (17.6 lb.)	8.5 kg. (18.7 lb.)	14.0 kg. (30.9 lb.)	18.0 kg. (39.7 lb.)	
Shipping weight (approximate)		9.0 kg. (19.8 lb.)	9.5 kg. (20.9 lb.)	15.0 kg. (33.1 lb.)	9.0 kg. (19.8 lb.)	9.5 kg. (20.9 lb.)	15.0 kg. (33.1 lb.)	19.0 kg. (41.9 lb.)	
USER REPLACEABLE BATTERIES									
Type		Hot swappable, sealed lead acid (maintenance-free)							
Capacity		12 V 7 Ah(12 V High rate option)	12 V High rate	2 x 12 V 7 Ah	12 V High rate		2 x 12 V 7 Ah	2 x 12 V High rate	
Recharge time to 80 %		< 3 hours		< 4 hours (16 hours for battery extension)	< 3 hours		< 4 hours (16 hours for battery extension)		
Management		Replace battery indicator & alarm							
ADVANCE WARNING DIAGNOSTICS									
Front panel LED's		On-line, UPS overload, Replace battery			On-line, UPS overload, Replace battery, Input voltage level, Load level, Battery level				
Audible alarms		On battery, Low battery, UPS overload, Replace battery							
COMMUNICATIONS INTERFACE									
USB port		Serial interface port can be connected to PC, workstations or servers for automatic unattended shutdown. Easy-Mon X software may be required.							
CONFORMANCE									
Design Regulation		EN 50091-1, EN 50091-2, EN 55022(B), EN 61000-4-2, (4), (6), IP21							
TYPICAL RUNTIME									
POS Terminal	100 VA / 70 W	34 min. (45 min. ⁽²⁾)	45 min.	78 min. (100 min. ⁽²⁾)	45 min.	45 min.	78 min. (100 min. ⁽²⁾)	100 min.	
1 set of PC ⁽¹⁾	250 VA / 150 W	12 min. (18 min. ⁽²⁾)	18 min.	32 min. (44 min. ⁽²⁾)	18 min.	18 min.	32 min. (44 min. ⁽²⁾)	44 min.	
2 set of PC ⁽¹⁾	500 VA / 300 W	2 min. (6 min. ⁽²⁾)	6 min.	13 min. (18 min. ⁽²⁾)	6 min.	6 min.	13 min. (18 min. ⁽²⁾)	18 min.	
3 set of PC ⁽¹⁾	750 VA / 450 W	-	-	6 min. (10 min. ⁽²⁾)	-	-	6 min. (10 min. ⁽²⁾)	10 min.	
4 set of PC ⁽¹⁾	1000 VA / 600 W	-	-	3 min. (6 min. ⁽²⁾)	-	-	3 min. (6 min. ⁽²⁾)	6 min.	

⁽¹⁾ is Personal computer, Pentium 4, 1.8 GHz chip with 15" monitor. ⁽²⁾ is backup time for high rate battery (option).

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• Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

• Easy-Mon X Software capable to work with Microsoft Windows 2000/NT/XP. Please check details of OS version at www.leonics.com LEN.BRO.UPS.065 Rev.7.20/2008