

# EXTRA SMART

## Extra Smart Cable TV UPS (Long-run, CS-L series) 600VA~3000VA



### General Features:

- Smart backup time estimation for any kind of battery
- Adjustable voltage sensitivity, voltage-transfer points & charging voltage, etc.
- Available for LCD and LED display
- Generator compatible
- Automatic restart of load after UPS shutdown
- Smart AVR function
- Cold-start capable
- Audible alarm
- Hot-swappable for battery
- Network manageable (SNMP optional)
- Full function of LCD display (for LCD version)
- Smart battery management
- Intelligent double stages of charging control, Wet battery compatible.
- Thermal control cooling fan



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Output	
Power Levels crated at nominal inputs	600VA / 420W ; 1200VA / 840W 1500VA / 1050W ; 2000VA / 1400W ; 3000VA / 2100W
Output Voltage	60Vac or 90Vac
Voltage Waveform	Pure Sine wave
Crest Factor	3:1
Output Frequency (Synchronized to Mains)	Auto Select for 50/60Hz 47Hz ~ 55Hz for 50Hz nominal, 56Hz ~ 65Hz for 60Hz nominal.
Regulation (Battery mode)	±3% of selected output voltage (adjustable by using the remote set-up software)
Transfer time	Blackout 3ms typical, Brownout 1ms typical. Battery mode to Normal mode: 1ms typical
Over current protection	Over load alarm level 100% ~ 120%, Over load shutdown level 120% ~ 190% (Adjustable by using the remote set-up software)
Input	
	115V Models230V Models
Nominal Voltage	100V / 110V / 115V / 120V200V / 220V / 230V / 240V
Input Frequency	47Hz ~ 65Hz, 50/60Hz auto-sensing.
Efficiency	90% typically (Normal mode)
Noise Filtering	Full time EMI/RFI filtering
Over current protection	600VA: by AC fuse 1200VA~3000VA: By re-settable over current protector600VA~2000VA: AC fuse 3000VA: By re-settable over current protector
Voltage Range	±20% for selected nominal voltage
Surge Protection	600VA~1500VA: 216 Joules 2000VA~3000VA~324 Joules600VA: 220 Joules 1200VA~3000VA: 440 Joules
Battery	
Battery type	Lead-Acid ; 25Ah~250Ah.
Voltage	600VA~2000VA: 48Vdc (optional 24Vdc, 36Vdc) 3000VA: 48Vdc
Typical backup time	No Limit (depending on battery)
Charging method	Smart pulse charging with two charging modes: Quick charging when battery is not fully charged, trickle charging when battery is 90% fully charged.
Charging current	9A at normal line & normal temperature (Average)
Averaged charging voltage for each battery	Quick charging mode: 14V maximum. Trickle charging mode: 13.2V ~ 13.9V adjustable by using the remote set-up software.
Protection	Protection for over current & over charging voltage (SCR control) Thermal protection (CPU control) When temperature inside UPS is over 45°C, charger will stop charging for 2.5 minutes followed by an 1.5 minutes charging. The cycle will be repeated until the temperature is lower than 44°C
Monitoring	Smart monitoring & warning for failed battery or open-circuit battery. Auto-detection each time when power on or every 6 days.
Communications & Management	
Standard Interface port	RS232, UPSilon2000 compatible.
Control panel	LCD or LED Selectable
Audible alarm	Alarm on battery: Low battery & Battery over voltage Alarm on abnormal operation: Over load, Short-circuit & Over heat.
EBT (Estimation of Backup time)	system Support for LCD display
Cooling fan control	Auto on / off, controlled by temperature & operation mode.
Environmental and Safety	
Operating Temperature	Up to 1500 meters: 0°C to 40°C (32°F to 104°F)
Transit / storage Temperature	-15°C to 55°C (5°F to 131°F)
Relative Humidity	5 - 95% non condensing
Operating Altitude	0 ~ 3000 meters
Audible noise at 1M from surface of unit	≤ 50 dBA
Safety Markings	CE
EMC	Class A, EN50091-2, FCC part15, IEC1000-2-2.
Isolation	1.5KVac for 1 minute between battery and 60Vac O/P 1.5KVac for 1 minute between AC I/P and 60Vac O/P
Quality control system	ISO 9001
Physical	
Dimensions: D x H x W (cm)	600VA: 38 x 20 x 18 (cm) / 48 x 33 x 30 (cm) 1200VA~2000VA: 45 x 20 x 18 (cm) / 54 x 33 x 30 (cm) 3000VA: 51 x 20 x 18 (cm) / 61 x 33 x 30 (cm)
Unit / Shipping	600VA: 15 / 16 (kg) / 1200VA: 19 / 20 (kg) 1500VA: 20 / 21 (kg) / 2000VA: 24 / 25 (kg) 3000VA: 33 / 35 (kg)
Weight: Net / Gross (kg)	
Packing	Export carton for each unit, 16 - 30 units per pallet.

**SOLTEC**

*Uninterruptible Power Supply*