

# Feature Benefit Analysis Digital Energy™ LP31 Series

## 3 phase in/1 phase out UPS 8-10-15-20kVA

### On Line Double Conversion Uninterruptible Power Supply

GE's LP31 Series is a UPS range based on true on line double conversion technology. Available in the power rating 8, 10, 15 and 20kVA, the LP31 Series UPS provides the user with the ultimate protection against any disturbances in the utility power such as surges, spikes, EMI noise, brown outs, black outs, etc. The LP31 is tailored for multi-server environments, working with all common operating systems. GE's Superior Battery Management (SBM) guarantees a favourable economic lifecycle.

Feature	Benefit
True on line double conversion	<ul style="list-style-type: none"> <li>• Maximum protection possible</li> <li>• Protects the load from damage due to any disturbance from the utility power through complete new independent output power</li> </ul>
Multilingual LCD screen	<ul style="list-style-type: none"> <li>• Immediate information on input voltage, load, battery runtime, events, status and alarm settings</li> <li>• Languages available: GB, D, NL, ES, IT (user selectable)</li> </ul>
Superior Battery Management  -Monthly automatic battery test -Deep calibration test  -Boost charging  -Temperature compensated charging -Load dependent end of discharge  -No load shutdown	SBM enhances the battery lifetime providing the following <ul style="list-style-type: none"> <li>• Knowledge before data less that batteries need replacing</li> <li>• Gives an exact update of the actual battery capacity, enabling accurate runtime prediction</li> <li>• Enables fast recharging of the batteries. If there is more than one mains failure in a short time, the UPS can support the next. Also equalises the battery voltages</li> <li>• The optimum charging curve for the batteries</li> <li>• The EOD voltage of the batteries depends on the discharge current: the higher the current, the lower the EOD battery voltage. This gives maximum capacity without over-discharging (which results in shortened battery life)</li> <li>• Prevents a needless deep discharge of the batteries</li> </ul>
Input power factor is >0.95	<ul style="list-style-type: none"> <li>• The AC current drawn by the UPS is less than that supplied to the load</li> <li>• No disturbances which can cause problems for other electrical equipment are fed back to the mains</li> </ul>
ECO mode	<ul style="list-style-type: none"> <li>• When ECO mode is selected, the LP31 operates continuously on bypass</li> <li>• High efficiency on ECO mode means lower energy costs</li> <li>• Good feature for less critical loads such as emergency lighting</li> </ul>
On board event logging	<ul style="list-style-type: none"> <li>• All events such as mains failures, alarms, etc, are logged into the memory of the UPS</li> <li>• Detailed diagnostics are available for the user</li> </ul>



GE imagination at work

# GE Consumer & Industrial Power Protection

Front accessible batteries	<ul style="list-style-type: none"> <li>Reduces footprint required for routine maintenance</li> </ul>
Extended autonomy available	<ul style="list-style-type: none"> <li>Matching battery packs are available</li> <li>No need to oversize the UPS for additional runtime</li> </ul>
Automatic bypass switch	<ul style="list-style-type: none"> <li>No interruption or data loss due to the use of mains power in case of high inrush current or overload</li> </ul>
Protection against overload, short circuit and over temperature	<ul style="list-style-type: none"> <li>The UPS is protected against any misuse</li> <li>Complies to all safety standards</li> </ul>
Bypass function enable/disable facility	<ul style="list-style-type: none"> <li>The bypass can be disabled</li> <li>Useful if the mains is very unstable or the UPS is used as a frequency converter</li> </ul>
RS232/SNMP compatible communication interface	<ul style="list-style-type: none"> <li>UPS can be monitored and managed via the network</li> <li>RS232 provided as standard, SNMP card as option</li> </ul>
Battery start (cold start)	<ul style="list-style-type: none"> <li>Essential equipment can run even with no mains available</li> </ul>
Wide AC input voltage range	<ul style="list-style-type: none"> <li>Minimises the need for battery operation</li> <li>Allows the supported load to run undisturbed when other UPS would have already switched to battery and died</li> </ul>
Wide input frequency range	<ul style="list-style-type: none"> <li>The UPS acts as a frequency stabiliser without switching to batteries</li> <li>Enhances the UPS functionality, and prolongs battery life</li> </ul>
Selectable bypass frequency window and tracking rate	<ul style="list-style-type: none"> <li>This feature makes the UPS optimal for generator operation</li> </ul>
Excellent overload behaviour	<ul style="list-style-type: none"> <li>Maximum protection even during misuse of the UPS</li> </ul>
Isolated potential-free relay contacts	<ul style="list-style-type: none"> <li>Universal alarm handling, no software required</li> <li>Can be integrated into existing systems</li> </ul>
Emergency Power Off (EPO) (standard)	<ul style="list-style-type: none"> <li>Possible to connect the UPS to, for example, a fire alarm system</li> <li>If activated, the UPS will shut down for safety reasons</li> </ul>
Option slots	<p>Provides maximum flexibility for options such as:</p> <ul style="list-style-type: none"> <li>SNMP plug-in card</li> <li>Potential-free relay contacts</li> <li>RS232/Contact interface</li> </ul>



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