



Global Technology  
and Energy Company



## On Line UPS

# VIGOR 4KVA/6KVA

### The New Full-Bridge Design with Double-Conversion Technology On Line UPS

Vigor 4K/6K adopts the new full-bridge structure and double-conversion technology, and provides efficient power output. The UPS operating efficiency is up to 93% in AC mode. Moreover, with the selectable ECO mode, the UPS operating efficiency would be higher than 97% for saving the money of power consumption in long time operating. The new full-bridge inverter structure enhances the reliability and performance with simple circuit and compact size than the other UPS in the market. The unique turntable LCD design allows the units to be installed in one of several configurations depending on the situation: Rack configuration, Tower configuration. Vigor series UPS also include many industrial leading features which provide you the most reliable uninterrupted power solution.

#### Rack/Tower 2 in 1 Design

Vigor series UPS is designed for the maximum flexibility for several configurations for the different environment. It can be installed in 19" rack or cabinet or can be installed in the tower mode with the included accessory.

#### Turntable LCD Display Design

The LCD display provides full information about UPS operating mode, input information, output information, battery information, load information and warning / alarms indications. Through the Config Switch, you can access the configuration menu on LCD display to setup your own parameters for the UPS. The turntable LCD design also offers flexibility for diverse installation surroundings and provides multiple configurations.

#### Compact Design with Internal Battery

Vigor 4Kva is only with 2U height and the 6Kva is with 3U height. Both models are with the batteries inside the same UPS chassis. No need to have another battery cabinet to complete the UPS installation. The high power density design also help to save the space for the UPS installation.

#### Intelligent Battery Management

With the easy access battery door design, the user could change the internal battery without special tools or open the completed UPS cover. When connect with additional EBM (External Battery Module), with the software configuration, the charging current would enlarge from 2A to 6A to shorten the battery recharging time. This UPS is also with battery temperature compensation design to adjust the battery charging voltage depends on the temperature to extend the battery lifetime.

#### Power Management Software

With the WinPower software which can offer the real time monitoring and control via LAN. The system administrator is also able to manage the communications between Vigor and PC on one PC easily. The multi-shutdown function of WinPower software is also able to help in having well organization to keep the most battery energy for the most critical equipment to extend its run time.

#### High Efficiency Operating Mode

High Efficiency mode is also known as ECO or Economy mode. Double-Conversion On-Line UPS has limited conversion efficiency, and the maximum operating efficiency is only up to 90-92%. However, if the AC status is always excellent, you can select the UPS running in ECO mode and acquire higher operating efficiency up to 97%. Once the AC is abnormal, the UPS will transfer back to normal mode to offer the pure output immediately. You can save more than 5% electric power during the operation time with this UPS.

#### Multiple Communication Interfaces

The UPS build multiple communication interfaces include the RS232 plus the DB9, USB, EPO and an intelligent slot. With our specified WinPower UPS monitoring software, you can have the direct connection to monitor the UPS via RS232 or USB. The EPO (Emergency Power Off) connector provides the safety operation to shutdown the UPS immediately. And the intelligent slot is used for optional SNMP or AS400 Dry Contact Relay card.

Power to Perfection

## ● VIGOR 4KVA / 6KVA ON-LINE UPS SPECIFICATION

| MODEL                           |                         | Vigor 4K   | Vigor 6K              |
|---------------------------------|-------------------------|--|-----------------------|
| TOPOLOGY                        |                         | On-Line Double Conversion  |                       |
| INPUT                           | Input voltage range     | 138V to 300V (0~60% load)<br>138~161V to 300V (60%~80% load)<br>161~184V to 300~286V (80%~100% load)   |                       |
|                                 | Bypass voltage range    | 230+/-10 %VAC (Adjustable)   |                       |
|                                 | Input frequency         | 50/60 Hz +/- 5 Hz (Auto sensing)   |                       |
|                                 | Input connection        | Hard Wire  |                       |
|                                 | Input power factor      | >0.98 @ full load  |                       |
|                                 | Support input type      | Inverter, Generator  |                       |
|                                 | OUTPUT                  | VA   | 4KVA                  |
| Watt                            |                         | 2800W  | 4200W                 |
| Voltage                         |                         | 220/230/240Vac ± 1%  |                       |
| Output waveform                 |                         | Pure Sinewave  |                       |
| Harmonic distortion (Line Mode) |                         | THD< 3% @ linear load<br>THD< =6% @ non-linear load  |                       |
| Output frequency (Battery Mode) |                         | 50 / 60Hz ±0.1Hz   |                       |
| Current crest ratio             |                         | 3:1  |                       |
| Output connection               |                         | Hard wire  |                       |
| Overload capacity               |                         | Line mode:<br>Over 110% for 2mins, then transfer to bypass and alarm.<br>Over 150% for 1s, then transfer to bypass and turn off output after 1min and alarm. |                       |
|                                 |                         | Battery mode:<br>Over 110% for 30s, then turn off output and alarm.<br>Over 120%, for 1s, then turn off output and alarm                                     |                       |
| TRANSFER TIME                   | AC to DC                | 0 ms   |                       |
| EFFICIENCY                      | Inverter mode           | >93%   |                       |
|                                 | Battery mode            | >92%   |                       |
|                                 | ECO mode                | >97%   |                       |
| BATTERY                         | Backup time (Full Load) | 8 min  | 6min                  |
|                                 | Typical recharge time   | 3 hours to 90% for Internal batteries;   |                       |
|                                 | Charge current          | 2A for Internal batteries; 6A max. (Adjustable)  |                       |
|                                 | Hot-swappable           | Yes  |                       |
|                                 | Temp. Compensation      | Yes  |                       |
| COMMUNICATION & INTERFACE       | Interface port(s)       | RS232+Dry contact (DB9) /USB/RJ45/SNMP Slot  |                       |
|                                 | Optional cards          | Webpower SNMP Card/AS400 Relay Card  |                       |
|                                 | LCD display             | Information for Load / Battery / Input / Output and Operating Mode   |                       |
|                                 | Audible alarm           | Actively audible alarm for utility failed/ battery low / overload condition  |                       |
|                                 | Silence switch          | Yes  |                       |
|                                 | EPO                     | Yes  |                       |
| ENVIRONMENTAL                   | Safety                  | CE   |                       |
|                                 | Noise level             | ≤52dB@1Meter   | ≤56dB@1Meter          |
|                                 | Operating temp.         | 0-1,500m @ 0-40°C / 1,501-3,000m @ 0-35 °C   |                       |
|                                 | Storage temp.           | -20°C ~ 55°C   |                       |
|                                 | Relative humidity       | 0 ~ 95% humidity, non-condensing   |                       |
|                                 | Operating altitude      | 3,000 meters   |                       |
|                                 | PHYSICAL                | Installation   | Rack & Tower (2-in-1) |
| Dimension (DxWxH) mm            |                         | 585x438x86.2   | 585x438x129           |
| Net weight (kg)                 |                         | 31.8kg   | 48.2kg                |

Manufactured by G-TEC Europe S.R.L. of Italy exclusively for  
Vence (Pte) Ltd. under private label

**DEFENDER**

Unlike any other UPS

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