



Product Features

- Occupies same volume as non battery backed CVT power system.
- Integral battery management with 10A charging facility.
- Operation Configurable by microprocessor controller.
- Remote monitor and control facility by RS232 interface.

| MAINS AC SUPPLY | |
|---|--|
| Input Voltage | 230V AC +15% -10%, Single Phase |
| Input Frequency | 50Hz +/- 6% |
| Input Current | 8A rms |
| Inrush Current | 30A Max for <10mS |
| Power Factor | >0.95 |
| Insulation to earth and to outputs to the requirements of EN60950 | |
| AC OUTPUT | |
| Output Voltage | 56 to 63VAC rms Adjustable, Factory set to 60VAC rms |
| Output Frequency | 50Hz +/- 6%, Quasi-square |
| Output Current Range | 0 - 15A rms |
| Line Regulation | +/- 1% |
| Short Circuit Current | <25A (before unit shuts down) |
| Output Over Voltage | 70V +/- 2VAC Trip & Reset |
| Output Voltage Drift | <20mV/°C |

| BATTERY MANAGEMENT | |
|----------------------|---|
| Float Voltage | 55.8V +/- 0.3V at 20°C, temperature compensated |
| Charging Current | 0 - 10A Max, depending on battery charge state. Current limit field selectable, 5A or 10A |
| Protection | Low Battery Detection, Inverter Shutdown, Battery Input, Fuse 30A |
| Battery Good Test | Automatically check battery condition on load every 7 days for 10 minutes |
| Battery Present Test | Automatically check every hour if the battery is present. |

| SYSTEM MANAGEMENT | | |
|---|---|---|
| Alarms | Alarm 1: AC Input Mains Good | Alarm 2: AC Output Good |
| | Alarm 3: AC/DC Converter Good | Alarm 4: Battery Good |
| | Alarm 5: Alarms 1-4 in series | Alarm 6: Battery Present |
| | Alarm 7: Battery Charger Good | Alarm 8: Alarms 1-4 & 6-7 Six Green LED's |
| | All alarms are available via 37 way D type socket and are isolated relay contacts | |
| Analogue Outputs | PSU Heatsink Temperature: | 50 mV/°C |
| | CATV Output VAC: | 0.1 VDC/Vrms |
| | CATV AC Output Current | 0.1 VDC/Arms |
| | Battery Voltage | 0.1 VDC/VDC |
| | Battery Charging Current | 1 VDC/ADC |
| All analogue outputs are available via 37 way D type socket | | |
| Serial Interface | An RS232 serial communications interface will be provided. The output information that will be available from this port will include the alarm status and the analogue signals as defined above. The interface will also enable the activation of the Battery Good Test and the Battery Present Test. | |
| Thermal Protection | Heatsink temperature 80°C, internal fan operation Heatsink temperature 100°C the system will switch to battery backup operation until heatsink has fallen to normal level. | |

| ENVIRONMENTAL CONDITIONS AND STANDARDS | | MECHANICAL FORMAT OPTIONS | |
|--|--------------------------------|---|---|
| Working Temperature | -20 to +65°C | The SP1650 is housed in a backboard mounting enclosure | |
| Storing Temperature | -25 to +85°C | Height: 410mm Depth: 210mm Width: 170mm Weight: <10Kg | |
| Enclosure | To IP20 | The SP1660 is housed in a 19" rack mounting enclosure | |
| Safety | EN60950 (Class 1 Equipment) | Height: 3U(133mm) Depth: 210mm Width: 405mm Weight: <10Kg | |
| EMC | CE Marked LVD Compliant | Electrical Connection | SP1650 on front & RH panels SP1660 on front panel only |
| | EN50081-1 (emissions) | Mains Input | Fused IEC connector |
| | EN50082-1 (immunity) | AC Output | Screw Terminals rising clamp type |
| | EN6100-3-2 (mains harmonics) | Battery Input | 4 way Beau Type |
| | EN61003-3 (mains fluctuations) | Temperature Sensor | 2 way Molex Mini - Fit JNR |
| | | Alarms, Remote Enable | 37 way D type socket |
| | | Serial Interface RS232 | 9 way D type socket |