

# 1600W Modified Sine Wave DC - AC Power Inverter

## Inverter Expert **CAR Series - CAR1.6KU(with USB)**



### FEATURES: ■

- I/P voltage:** 12V DC or 24V DC or 48V DC
- Output voltage:** 100/110/120V AC or 220/230/240V AC
- Output frequency:** 50/60Hz ± 3
- I/P protections:** Bat.Low alarm; Bat.Low shutdown; Over voltage; Polarity reverse
- O/P protections:** Over load; Short circuit; Earth fault; Over temperature; Soft start
- Output waveform:** Modified Sine Wave
- Design:** High frequency design
- Topology:** Microprocessor
- No load current draw:** Low power consumption (standby)
- In front panel:** With power ON/OFF switch and LED indicator
- ON/OFF remote control:** optional
- Cooling fan:** Load controlled or temperature controlled cooling fan (optional)



### Output Receptacle (optional)



### ■ SPECIFICATION:

| Model       | CAR1.6KU-121                                    | CAR1.6KU-122  | CAR1.6KU-241 | CAR1.6KU-242             | CAR1.6KU-481 | CAR1.6KU-482            |             |
|-------------|---|---|--------------|--------------------------|--------------|-------------------------|-------------|
| Output      | AC Voltage                                      | 110V  | 230V         | 110V                     | 230V         | 110V                    | 230V        |
|             | AC Voltage Range                                | 100~120V AC   | 220~240V AC  | 100~120V AC              | 220~240V AC  | 100~120V AC             | 220~240V AC |
|             | AC Regulation                                   | ± 10%   |              |                          |              |                         |             |
|             | Rated Power                                     | 1600W   |              |                          |              |                         |             |
|             | Peak Power                                      | 3200W(few seconds)  |              |                          |              |                         |             |
|             | Waveform  | Modified Sine Wave  |              |                          |              |                         |             |
|             | Frequency                                       | 50/60Hz ± 3   |              |                          |              |                         |             |
|             | USB Port  | 5V 500mA(optional)  |              |                          |              |                         |             |
|             | LED Indicator                                   | Green for power on, Red for power failure / protection status                 |              |                          |              |                         |             |
| Cooling fan | Control by load                                 |   |              |                          |              |                         |             |
| Input       | DC Current                                      | 160A  |              | 80A                      |              | 40A                     |             |
|             | No Load Current Draw                            | 0.9A  |              | 0.9A                     |              | 0.9A                    |             |
|             | DC Voltage                                      | 12V   |              | 24V                      |              | 48V                     |             |
|             | Voltage Range                                   | 9.5~16V DC  |              | 19~32V DC                |              | 38~64V DC               |             |
|             | DC Connector                                    | BVR16 battery clip * 1ea  |              | BVR10 battery clip * 1ea |              | BVR6 battery clip * 1ea |             |
| Protection  | Efficiency                                      | ≥90%  |              |                          |              |                         |             |
|             | Low Voltage Alarm                               | 11 ± 0.5V DC  |              | 22 ± 1V DC               |              | 44 ± 1V DC              |             |
|             | Low Voltage Shutdown                            | 9.5 ± 0.5V DC   |              | 19 ± 1V DC               |              | 38 ± 1V DC              |             |
|             | Reset Voltage after L. V. S                     | 11.5V~12V DC  |              | 23~24V DC                |              | 46~48V DC               |             |
|             | Overload  | Shut off o/p, re-power to recover   |              |                          |              |                         |             |
|             | Over Voltage                                    | 15 ± 0.5V DC  |              | 30 ± 1V DC               |              | 60 ± 2V DC              |             |
|             | Over Temperature                                | 45 ± 5 °C / 113 ± 9 °F  |              |                          |              |                         |             |
|             | Output Short-circuit                            | Shut off o/p, when output is short circuit                                    |              |                          |              |                         |             |
|             | Reverse Polarity                                | By fuse open  |              |                          |              |                         |             |
|             | Replaceable Fuse                                | 40A*6   |              | 20A*6                    |              | 10A*6                   |             |
| Soft Start  | Yes, 3~5's                                      |   |              |                          |              |                         |             |
| Earth Fault | Shut off o/p when the load has electric leakage |   |              |                          |              |                         |             |
| Environment | Working Temp.                                   | 0~30°C @ 100% load; 40°C @ 50% load   |              |                          |              |                         |             |
|             | Working Humidity                                | 20%~90% RH non-condensing   |              |                          |              |                         |             |
|             | Storage Temp., Humidity                         | -30~+70°C / -22~+158°F, 10~95%RH  |              |                          |              |                         |             |
|             | Temp. Coefficient                               | ± 0.05%(0~50°C)   |              |                          |              |                         |             |
| Safety&EMC  | Isolation Resistance                            | I/P-O/P: 100M Ohms/500VDC/25°C/70%RH  |              |                          |              |                         |             |
|             | EMI Conduction&Radiation                        | Compliance to EN55022 class B, 72/245/CEE, 95/54/CE                           |              |                          |              |                         |             |
|             | EMS Immunity                                    | Compliance to EN61000-4-2,3   |              |                          |              |                         |             |
|             | LVD   | Compliance to EN60950   |              |                          |              |                         |             |
|             | E-mark  | E8 10R-02 0633  |              |                          |              |                         |             |
| Other       | Remote Control                                  | optional(switch with 5m wire)   |              |                          |              |                         |             |
|             | MTBF  | 100khrs min. MIL - HDBK - 217(25°C)   |              |                          |              |                         |             |
|             | N.W/unit  | 3200g   |              |                          |              |                         |             |
|             | Dimension(cm)                                   | 32.5*20.8*7.7(L*W*H)  |              |                          |              |                         |             |
|             | Packing   | Blister card/gift box, 4 units/16.8Kg/Ctn(51.5*39*31.5cm)                     |              |                          |              |                         |             |
|             | Output Receptacle                               | A, B, C, D, E, F, G, H, I, J, K, L, M, N(optional)                            |              |                          |              |                         |             |
|             | Applications                                    | Home appliance, power tools, office and portable equipment and vehicle...etc. |              |                          |              |                         |             |

Note: Specification prior to change without notice