

### Table 3 Charge Mode Specifications

| Utility Charging Mode                                  |   |         |              |        |         |
|--|---|---------|--------------|--------|---------|
| INVERTER MODEL   | 1.5KVA  | 4KVA    | 4KVA         | 5.5KVA | 6.2KVA  |
|  | PVmax=160V  |         |              |        |         |
| <b>Max Charging Current (PV+AC)</b><br>(@ VI/P=230Vac) | 120Amp  |         | 100Amp       | 100Amp | 120Amp  |
| <b>Max Charging Current (AC)</b><br>(@ VI/P=230Vac)    | 80Amp   |         |              |        |         |
| <b>Bulk Charging Voltage</b>                           | <b>Flooded Battery</b>  | 14.6Vdc | 29.2Vdc      |        | 58.4Vdc |
|  | <b>AGM / Gel Battery</b>  | 14.1Vdc | 28.2Vdc      |        | 56.4Vdc |
| <b>Floating Charging Voltage</b>                       | 13.5Vdc   | 27Vdc   |              | 54Vdc  |         |
| <b>Overcharge Protection</b>                           | 15.5 Vdc  | 33Vdc   |              | 63Vdc  |         |
| <b>Charging Algorithm</b>                              | 3-Step  |         |              |        |         |
| <b>Charging Curve</b>                                  | <p>The graph illustrates the charging process for a battery cell. The left y-axis represents Battery Voltage (per cell) with markers at 2.25Vdc and 2.43Vdc (2.35Vdc). The right y-axis represents Charging Current (%). The x-axis represents Time. The curve shows a linear increase in voltage during the Bulk phase (constant current), a constant voltage plateau during the Absorption phase (constant voltage), and a gradual decrease in current during the Maintenance phase (floating). Key time intervals T0 and T1 are marked, with a note: T1 = 10 * T0, minimum 10mins, maximum 8hrs.</p> |         |              |        |         |
| Solar Input  |   |         |              |        |         |
| INVERTER MODEL   | 1.5KVA  | 4KVA    | 4KVA         | 5.5KVA | 6.2KVA  |
|  | PVmax=160V  |         |              |        |         |
| <b>Rated Power</b>                                     | 900W  | 1500W   | 4000W        | 5500W  | 6500W   |
| <b>Max. PV Array Open Circuit Voltage</b>              | 160Vdc  |         | 500Vdc       |        |         |
| <b>PV Array MPPT Voltage Range</b>                     | 30Vdc~160Vdc  |         | 60Vdc~500Vdc |        |         |
| <b>Max. Input Current</b>                              | 30A   | 50A     | 15A          | 18A    | 27A     |
| <b>Max. Charging Current(PV)</b>                       | 60A   |         | 100A         | 100A   | 120A    |