## SIMPLIPHI YOUR POWER WITH THE EXprESS $\begin{gathered}\text { \& turkey energy storage } \\ \text { \& management }\end{gathered}$

| Specifications | ExprESS ${ }^{\text {TM }} 24 \mathrm{~V}$ | ExprESS ${ }^{\text {m }} 48 \mathrm{~V}$ |
| :---: | :---: | :---: |
| General |  |  |
| Dimensions ( $\mathrm{W} \times \mathrm{H}$ w/feet $\times \mathrm{D}$ ) | $36 \times 40 \times 17 \mathrm{in} .(\mathrm{w} / \mathrm{feet}) / 92 \times 102 \times 43 \mathrm{~cm}$ (w/feet) |  |
| Dimensions (W $\times$ H w/wheels $\times \mathrm{D}$ ) | $36 \times 41 \times 17$ in. (w/caster wheels) / $92 \times 104 \times 43 \mathrm{~cm}$ (w/caster wheels) |  |
| Weight | 366 lbs . (166 kg), incl. batteries | $411.5 \mathrm{lbs} .(187 \mathrm{~kg}$ ), incl. batteries |
| Enclosure Rating | NEMA 3R Outdoor rated | NEMA 3R Outdoor rated |
| Operating Temperature | -4 to $122{ }^{\circ} \mathrm{F}\left(-20\right.$ to $\left.50^{\circ} \mathrm{C}\right)$ | -4 to $122{ }^{\circ} \mathrm{F}\left(-20\right.$ to $\left.50^{\circ} \mathrm{C}\right)$ |
| Mounting | Free-standing or pad mounted | Free-standing or pad mounted |
| Inverter |  |  |
| Magnum Energy | MS2024 | MS4448 PAE |
| Application | On / Off Grid | On / Off Grid |
| AC Connections | (4) 115 V GFCI sockets for powering devices rated up to 15 Amps | (4) 115 V GFCl sockets for powering devices rated up to 15 Amps |
| AC Output | $16 \mathrm{~A}, 120 \mathrm{~V}$ AC, 60 Hz | $18 \mathrm{~A} \times 2,240 \mathrm{VAC} ; 60 \mathrm{~Hz}$ |
| Rated Power | 2 kW | 4.4 kW (3.8 kW max load rate) |
| CEC Weighted Efficiency | 94\% | 94\% |
| Battery |  |  |
| SimpliPhi Power | PHI 2.9 kWh 24 VDC ( $\times 2$ ) | PHI 3.8 kWh 48VDC (x2) |
| Rated kWh Capacity | 5.8 kWh | 7.6 kWh |
| Depth of Discharge | up to 100\% (80\% recommended) | up to 100\% (80\% recommended) |
| Round Trip Efficiency | 98\% | 98\% |
| Cycle Life | 10,000+(@80\% DOD) | 10,000+(@80\% DOD) |
| Amp-Hours | 230 Ah | 150 Ah |
| Nominal Voltage | 25.6 VDC | 51.2 VDC |
| Max Charge Voltage | 28 VDC | 56 VDC |
| Minimum Operating Voltage | $\begin{gathered} 24 \mathrm{VDC} \\ \text { (correlated with } 100 \% \mathrm{DOD} \text { ) } \end{gathered}$ | 48 VDC (correlated with 100\% DOD) |
| Max Combined Charge \& Discharge Rate | 90 ADC / 2.3 kW DC (continuous) | 75 ADC / 3.84 kW DC (continuous) |
| Warranty Period | 10 years | 10 years |
| Solar (PV inlet) |  |  |
| Morningstar Charge Controller | TriStar-45 PWM | PT-100 MPPT |
| Max Usable PV Output | 1.3 kW | 4.1 kW |
| Max Charge Current | 45 A DC | 75 A DC (reduced from $100 \mathrm{~A} \mathrm{DC)}$ |
| PV Array Operating Voltage | 36 to 120 V DC | 72 to 187 V DC |
| Max PV Array Open Circuit Voltage | 125 V DC | 240 V DC |
| Other Features |  |  |
| System Interface | ME-ARC | ME-ARC |

