Manufacturer: Advanced Energy Industries

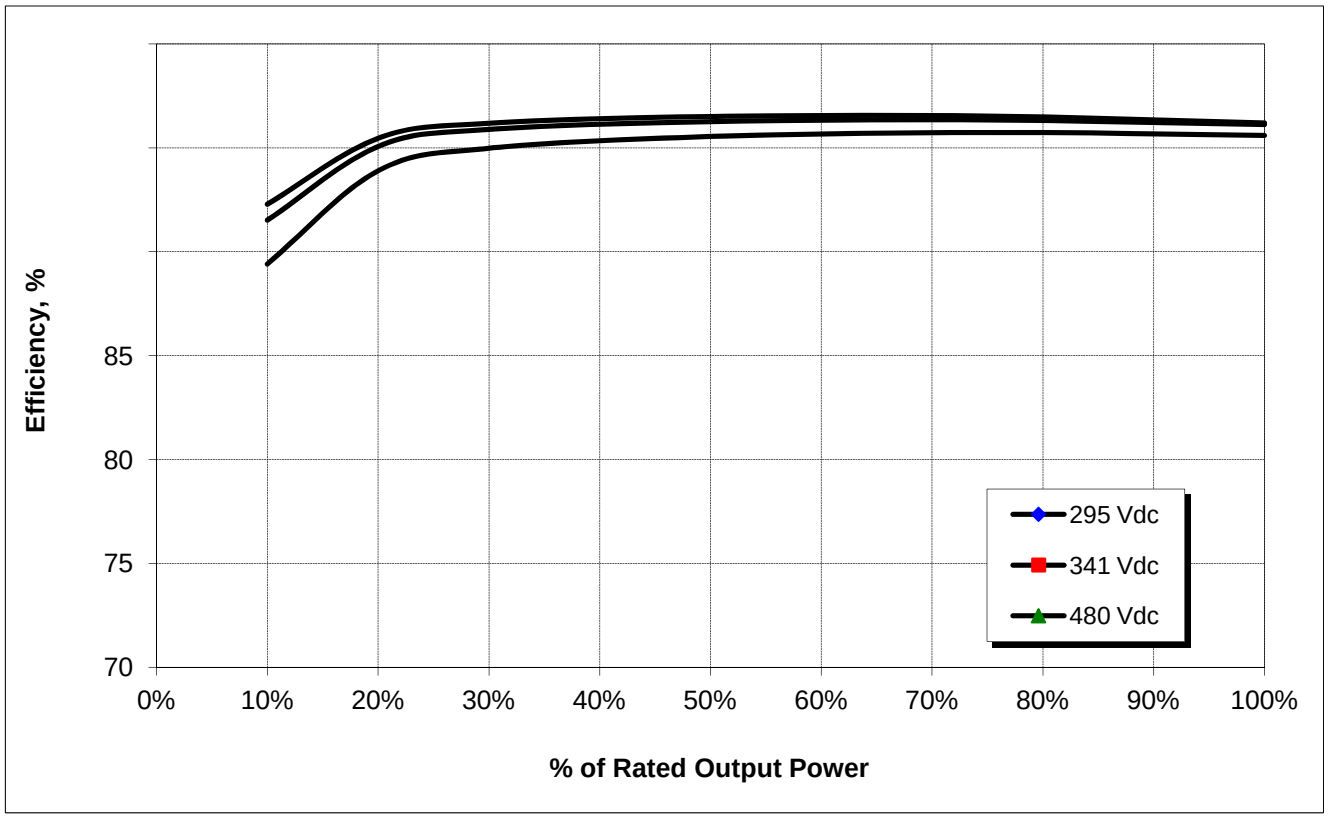
Model #: PVP75kW-600

Rated Maximum Continuous Output Power: 75.00 kW  Night Tare Loss: 105.84 W

Vmin: 295 Vdc  Vnom: 341 Vdc  Vmax: 480 Vdc

| | | Power Level (%; kW) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 10% | 20% | 30% | 50% | 75% | 100% | |
| Input Voltage (Vdc) | | 7.50 | 15.00 | 22.50 | 37.50 | 56.25 | 75.00 | Wtd |
| Vmin | 295 | 92.3 | 95.5 | 96.2 | 96.5 | 96.5 | 96.2 | 96.238 |
| Vnom | 341 | 91.5 | 95.1 | 95.9 | 96.3 | 96.3 | 96.1 | 95.997 |
| Vmax | 480 | 89.4 | 93.9 | 95.0 | 95.5 | 95.7 | 95.6 | 95.261 |

**CEC Efficiency = 96.0%**



Inverter Efficiency Data

Minimum of 5 samples required

| Specified | | Sample #1 | | | Sample #2 | | | Sample #3 | | | Sample #4 | | | Sample #5 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Output Power | Input Voltage | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency |
| (% of rated) | (Vdc) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) |
| 10% | Vmin | 7372.0 | 295.9 | 92.29 | 7371.0 | 295.9 | 92.30 | 7371.0 | 295.9 | 92.29 | 7366.0 | 295.9 | 92.28 | 7361.0 | 295.9 | 92.29 |
| 20% | Vmin | 16355.0 | 295.9 | 95.45 | 16363.0 | 296.0 | 95.44 | 16357.0 | 296.0 | 95.44 | 16352.0 | 295.9 | 95.46 | 16360.0 | 295.9 | 95.46 |
| 30% | Vmin | 24254.0 | 295.7 | 96.18 | 24262.0 | 295.7 | 96.18 | 24264.0 | 295.7 | 96.18 | 24253.0 | 295.7 | 96.18 | 24250.0 | 295.7 | 96.18 |
| 50% | Vmin | 33920.0 | 295.7 | 96.50 | 33933.0 | 295.7 | 96.50 | 33937.0 | 295.7 | 96.50 | 33936.0 | 295.7 | 96.50 | 33939.0 | 295.7 | 96.50 |
| 75% | Vmin | 52633.0 | 295.7 | 96.52 | 52623.0 | 295.7 | 96.53 | 52630.0 | 295.7 | 96.52 | 52646.0 | 295.7 | 96.52 | 52647.0 | 295.7 | 96.52 |
| 100% | Vmin | 71510.0 | 295.7 | 96.21 | 71530.0 | 295.7 | 96.21 | 71510.0 | 295.7 | 96.21 | 71520.0 | 295.7 | 96.21 | 71510.0 | 295.7 | 96.20 |
| 10% | Vnom | 7332.0 | 342.0 | 91.51 | 7330.0 | 342.0 | 91.51 | 7334.0 | 342.0 | 91.52 | 7338.0 | 342.0 | 91.54 | 7338.0 | 342.0 | 91.52 |
| 20% | Vnom | 16373.0 | 341.9 | 95.06 | 16369.0 | 341.9 | 95.06 | 16385.0 | 341.9 | 95.06 | 16384.0 | 341.9 | 95.06 | 16385.0 | 341.9 | 95.06 |
| 30% | Vnom | 24220.0 | 341.9 | 95.88 | 24224.0 | 341.9 | 95.89 | 24219.0 | 341.9 | 95.88 | 24233.0 | 341.9 | 95.88 | 24225.0 | 341.9 | 95.88 |
| 50% | Vnom | 33913.0 | 341.8 | 96.26 | 33914.0 | 341.8 | 96.25 | 33906.0 | 341.8 | 96.25 | 33907.0 | 341.8 | 96.25 | 33911.0 | 341.8 | 96.25 |
| 75% | Vnom | 52631.0 | 342.0 | 96.33 | 52630.0 | 342.0 | 96.33 | 52624.0 | 342.0 | 96.34 | 52630.0 | 342.0 | 96.34 | 52615.0 | 342.0 | 96.34 |
| 100% | Vnom | 71490.0 | 342.0 | 96.11 | 71500.0 | 342.0 | 96.10 | 71530.0 | 342.0 | 96.12 | 71520.0 | 342.0 | 96.11 | 71530.0 | 342.0 | 96.11 |
| 10% | Vmax | 7356.0 | 481.5 | 89.40 | 7361.0 | 481.5 | 89.41 | 7362.0 | 481.5 | 89.40 | 7365.0 | 481.5 | 89.42 | 7353.0 | 481.5 | 89.40 |
| 20% | Vmax | 16415.0 | 481.5 | 93.90 | 16410.0 | 481.5 | 93.90 | 16410.0 | 481.5 | 93.90 | 16409.0 | 481.5 | 93.90 | 16412.0 | 481.5 | 93.90 |
| 30% | Vmax | 24258.0 | 481.8 | 94.98 | 24253.0 | 481.8 | 94.99 | 24248.0 | 481.9 | 94.98 | 24247.0 | 481.8 | 94.99 | 24249.0 | 481.8 | 94.99 |
| 50% | Vmax | 33945.0 | 481.4 | 95.54 | 33943.0 | 481.4 | 95.54 | 33930.0 | 481.4 | 95.53 | 33947.0 | 481.4 | 95.55 | 33950.0 | 481.4 | 95.56 |
| 75% | Vmax | 52659.0 | 481.6 | 95.74 | 52647.0 | 481.6 | 95.74 | 52643.0 | 481.6 | 95.74 | 52655.0 | 481.6 | 95.74 | 52658.0 | 481.6 | 95.75 |
| 100% | Vmax | 71500.0 | 481.2 | 95.60 | 71510.0 | 481.2 | 95.61 | 71510.0 | 481.2 | 95.61 | 71490.0 | 481.2 | 95.61 | 71510.0 | 481.2 | 95.60 |

| Specified | | Sample #6 | | | Sample #7 | | | Sample #8 | | | Sample #9 | | | Sample #10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Output Power | Input Voltage | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency | Output Power | Input Voltage | Efficiency |
| (% of rated) | (Vdc) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) | (W) | (Vdc) | (%) |
| 10% | Vmin | 7363.0 | 295.9 | 92.28 | 7364.0 | 295.9 | 92.28 | 7367.0 | 295.9 | 92.27 | 7371.0 | 295.9 | 92.29 | 7365.0 | 295.9 | 92.29 |
| 20% | Vmin | 16361.0 | 295.9 | 95.458 | 16352.0 | 295.9 | 95.458 | 16358.0 | 295.9 | 95.456 | 16360.0 | 295.9 | 95.456 | 16361.0 | 295.9 | 95.460 |
| 30% | Vmin | 24255.0 | 295.8 | 96.170 | 24252.0 | 295.8 | 96.171 | 24250.0 | 295.8 | 96.173 | 24247.0 | 295.8 | 96.170 | 24257.0 | 295.8 | 96.171 |
| 50% | Vmin | 33926.0 | 295.7 | 96.502 | 33930.0 | 295.7 | 96.502 | 33927.0 | 295.8 | 96.490 | 33916.0 | 295.7 | 96.504 | 33935.0 | 295.7 | 96.509 |
| 75% | Vmin | 52627.0 | 295.7 | 96.523 | 52629.0 | 295.7 | 96.521 | 52621.0 | 295.7 | 96.525 | 52634.0 | 295.7 | 96.525 | 52631.0 | 295.7 | 96.525 |
| 100% | Vmin | 71520.0 | 295.7 | 96.204 | 71530.0 | 295.7 | 96.203 | 71520.0 | 295.7 | 96.197 | 71570.0 | 295.7 | 96.165 | 71550.0 | 295.7 | 96.158 |
| 10% | Vnom | 7340.0 | 342.0 | 91.524 | 7337.0 | 342.0 | 91.532 | 7334.0 | 342.0 | 91.521 | 7341.0 | 342.0 | 91.524 | 7337.0 | 342.0 | 91.514 |
| 20% | Vnom | 16390.0 | 341.9 | 95.064 | 16376.0 | 341.9 | 95.056 | 16384.0 | 341.9 | 95.061 | 16391.0 | 341.9 | 95.063 | 16377.0 | 341.9 | 95.063 |
| 30% | Vnom | 24226.0 | 341.9 | 95.884 | 24228.0 | 341.9 | 95.879 | 24233.0 | 341.9 | 95.883 | 24231.0 | 341.9 | 95.873 | 24229.0 | 341.9 | 95.876 |
| 50% | Vnom | 33913.0 | 341.8 | 96.252 | 33916.0 | 341.8 | 96.261 | 33915.0 | 341.7 | 96.254 | 33903.0 | 341.8 | 96.257 | 33920.0 | 341.8 | 96.257 |
| 75% | Vnom | 52603.0 | 342.0 | 96.337 | 52621.0 | 342.0 | 96.339 | 52624.0 | 342.0 | 96.334 | 52617.0 | 342.0 | 96.336 | 52595.0 | 342.0 | 96.337 |
| 100% | Vnom | 71550.0 | 342.0 | 96.115 | 71570.0 | 342.0 | 96.106 | 71580.0 | 342.0 | 96.114 | 71520.0 | 342.0 | 96.117 | 71530.0 | 342.0 | 96.116 |
| 10% | Vmax | 7350.0 | 481.5 | 89.400 | 7355.0 | 481.5 | 89.409 | 7348.0 | 481.5 | 89.408 | 7348.0 | 481.5 | 89.396 | 7355.0 | 481.5 | 89.403 |
| 20% | Vmax | 16415.0 | 481.5 | 93.904 | 16402.0 | 481.5 | 93.901 | 16388.0 | 481.5 | 93.893 | 16380.0 | 481.5 | 93.893 | 16399.0 | 481.5 | 93.901 |
| 30% | Vmax | 24264.0 | 481.8 | 94.987 | 24256.0 | 481.8 | 94.987 | 24251.0 | 481.8 | 94.986 | 24240.0 | 481.8 | 94.990 | 24244.0 | 481.8 | 94.986 |
| 50% | Vmax | 33946.0 | 481.4 | 95.557 | 33934.0 | 481.4 | 95.550 | 33921.0 | 481.4 | 95.554 | 33934.0 | 481.4 | 95.555 | 33931.0 | 481.4 | 95.553 |
| 75% | Vmax | 52658.0 | 481.6 | 95.749 | 52657.0 | 481.5 | 95.759 | 52651.0 | 481.6 | 95.753 | 52651.0 | 481.5 | 95.756 | 52660.0 | 481.6 | 95.754 |
| 100% | Vmax | 71530.0 | 481.2 | 95.601 | 71520.0 | 481.2 | 95.598 | 71540.0 | 481.2 | 95.597 | 71580.0 | 481.2 | 95.593 | 71540.0 | 481.2 | 95.590 |