

## Mini-Inverter Derating Chart Per Power Factor (US)

Date: January 2017

| Rated Capacity & Voltage | Power Factor | Recommended Rated Load |                |
|--------------------------|--------------|------------------------|----------------|
|                          |              | Power / Watts          | Best Practice* |
| 720W / 277V              | 1.00         | 720W                   | 576W           |
|                          | 0.98         | 720W                   | 576W           |
|                          | 0.96         | 720W                   | 576W           |
|                          | 0.94         | 720W                   | 576W           |
|                          | 0.92         | 720W                   | 576W           |
|                          | 0.90         | 720W                   | 576W           |
|                          | 0.88         |                        | 576W           |
|                          | 0.86         |                        | 576W           |
|                          | 0.84         |                        | 576W           |
|                          | 0.82         |                        | 576W           |
|                          | 0.80         | 665W                   | 576W           |
|                          | 0.75         |                        |                |
|                          | 0.70         | 532W                   | 532W           |
| 720W / 120V              | 1.00         | 720W                   | 576W           |
|                          | 0.98         | 720W                   | 576W           |
|                          | 0.96         | 720W                   | 576W           |
|                          | 0.94         | 720W                   | 576W           |
|                          | 0.92         | 720W                   | 576W           |
|                          | 0.90         | 720W                   | 576W           |
|                          | 0.88         | 720W                   | 576W           |
|                          | 0.86         | 720W                   | 576W           |
|                          | 0.84         | 720W                   | 576W           |
|                          | 0.82         | 720W                   | 576W           |
|                          | 0.80         | 720W                   | 576W           |
|                          | 0.75         |                        |                |
|                          | 0.70         | 523W                   | 523W           |
| 400W / 277V              | 1.00         | 400W                   | 320W           |
|                          | 0.98         | 400W                   | 320W           |
|                          | 0.96         | 400W                   | 320W           |
|                          | 0.94         | 400W                   | 320W           |
|                          | 0.92         | 400W                   | 320W           |
|                          | 0.90         | 400W                   | 320W           |
|                          | 0.88         |                        |                |
|                          | 0.86         |                        |                |
|                          | 0.84         |                        |                |
|                          | 0.82         |                        |                |
|                          | 0.80         | 285W                   | 285W           |
|                          | 0.75         |                        |                |
|                          | 0.70         | 190W                   | 190W           |
| 400W / 120V              | 1.00         | 400W                   | 320W           |
|                          | 0.98         | 400W                   | 320W           |
|                          | 0.96         | 400W                   | 320W           |
|                          | 0.94         | 400W                   | 320W           |
|                          | 0.92         | 400W                   | 320W           |
|                          | 0.90         | 400W                   | 320W           |
|                          | 0.88         | 400W                   | 320W           |
|                          | 0.86         | 400W                   | 320W           |
|                          | 0.84         | 400W                   | 320W           |
|                          | 0.82         | 400W                   | 320W           |
|                          | 0.80         | 400W                   | 320W           |
|                          | 0.75         |                        | 320W           |
|                          | 0.70         | 361W                   | 320W           |

| Rated Capacity & Voltage | Power Factor | Recommended Rated Load |                |
|--------------------------|--------------|------------------------|----------------|
|                          |              | Power / Watts          | Best Practice* |
| 250W / 277V              | 1.00         | 250W                   | 200W           |
|                          | 0.98         | 250W                   | 200W           |
|                          | 0.96         | 250W                   | 200W           |
|                          | 0.94         | 250W                   | 200W           |
|                          | 0.92         | 250W                   | 200W           |
|                          | 0.90         | 250W                   | 200W           |
|                          | 0.88         |                        | 200W           |
|                          | 0.86         |                        | 200W           |
|                          | 0.84         |                        | 200W           |
|                          | 0.82         |                        | 200W           |
|                          | 0.80         | 228W                   | 200W           |
|                          | 0.75         |                        |                |
|                          | 0.70         | 124W                   | 124W           |
| 250W / 120V              | 1.00         | 250W                   | 200W           |
|                          | 0.98         | 250W                   | 200W           |
|                          | 0.96         | 250W                   | 200W           |
|                          | 0.94         | 250W                   | 200W           |
|                          | 0.92         | 250W                   | 200W           |
|                          | 0.90         | 250W                   | 200W           |
|                          | 0.88         |                        | 200W           |
|                          | 0.86         |                        | 200W           |
|                          | 0.84         |                        | 200W           |
|                          | 0.82         |                        | 200W           |
|                          | 0.80         | 228W                   | 200W           |
|                          | 0.75         |                        |                |
|                          | 0.70         | 200W                   | 200W           |
| 125W / 277V              | 1.00         | 125W                   | 100W           |
|                          | 0.98         | 125W                   | 100W           |
|                          | 0.96         | 125W                   | 100W           |
|                          | 0.94         | 125W                   | 100W           |
|                          | 0.92         | 125W                   | 100W           |
|                          | 0.90         | 125W                   | 100W           |
|                          | 0.88         |                        |                |
|                          | 0.86         |                        |                |
|                          | 0.84         |                        |                |
|                          | 0.82         |                        |                |
|                          | 0.80         | 67W                    | 67W            |
|                          | 0.75         |                        |                |
|                          | 0.70         | 51W                    | 51W            |
| 125W / 120V              | 1.00         | 125W                   | 100W           |
|                          | 0.98         | 125W                   | 100W           |
|                          | 0.96         | 125W                   | 100W           |
|                          | 0.94         | 125W                   | 100W           |
|                          | 0.92         | 125W                   | 100W           |
|                          | 0.90         | 125W                   | 100W           |
|                          | 0.88         |                        |                |
|                          | 0.86         |                        |                |
|                          | 0.84         |                        |                |
|                          | 0.82         |                        |                |
|                          | 0.80         | 68W                    | 68W            |
|                          | 0.75         |                        |                |
|                          | 0.70         | 50W                    | 50W            |

(\*) Best Practice suggest not to load the unit above 80% of its capacity, to take into account aging batteries. Power Factor has no impact on batteries, therefore derating the unit because of lower Power Factor do not require additional derating for batteries: