CHILICON POWER CP-720
Dual Panel Microinverter

CP-720™ Series Microinverters

The Chilicon CP-720 allows installers to maximize PV system production, while minimizing installation and operational costs. Microinverter based architectures offer the benefit of increased flexibility in panel deployment, while also providing per panel visibility to simplify system O&M. With its all-AC approach, integrated grounding, modular bus cabling, and ability to support up to 16 panels on a 30A branch circuit, the CP-720 simplifies both design and installation. Both freq-Watt and volt-Watt modes allow AC control by off-grid systems. Coupled with Chilicon’s CP-100 gateway and cloud-based monitoring software, the CP-720 can form the energy management backbone of both residential and commercial PV systems.

Performance
• Supports up to 840W with no clipping (or 2x420W)
• Maximizes energy production over life of system
• Minimizes losses due to shading and debris
• Eliminates single point of failure for system

Simplicity
• All AC design – No string calculations needed
• No GEC needed for microinverters
• Easy installation with standardized trunk cables

Versatility
• Compatible with most 60, 72, 96, 128 cell panels
• Single SKU 240V or 208V
• Allows for variable module placement
• Robust PLC communication protocol (500 ft range)
• Self supply mode (zero-export)
• Supports up to 30A branch circuits

Reliability, Safety, & Compliance
• NEMA 6 rated construction
• 25 year warranty
• AC branch circuits will not support arc faults
• Quick disconnect circuit to mitigate grid instabilities
• NEC 690.12 rapid shutdown compliant
• CA Rule 21 (UL 1741-SA) compliant

www.chiliconpower.com
# CP-720-60/72/96-208/240-MC4 Microinverter Specifications

## INPUT DATA (DC)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended input power (STC)</td>
<td>(190 - 420 W) x 2; (380 - 840 W) x 1</td>
</tr>
<tr>
<td>Maximum DC input voltage</td>
<td>120 V</td>
</tr>
<tr>
<td>MPPT voltage tracking range</td>
<td>56 – 82 V (240V)</td>
</tr>
<tr>
<td></td>
<td>48.5 – 82 V (208V)</td>
</tr>
<tr>
<td>Operating range</td>
<td>47 – 82 V</td>
</tr>
<tr>
<td>Min./Max. start voltage</td>
<td>44 – 96 V</td>
</tr>
<tr>
<td>Max. DC input short circuit current</td>
<td>16 A</td>
</tr>
<tr>
<td>Max. DC input current</td>
<td>13.5 A</td>
</tr>
<tr>
<td>Ground fault protection</td>
<td>Transformer isolated 2000 Vrms input/output/chassis</td>
</tr>
</tbody>
</table>

## OUTPUT DATA (AC)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>@ 208 V</th>
<th>@ 240 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. continuous output power</td>
<td>713 W</td>
<td>720 W</td>
</tr>
<tr>
<td>Max. continuous output current</td>
<td>3.43 A</td>
<td>3.0 A</td>
</tr>
<tr>
<td>Nominal output voltage / range</td>
<td>208 / 183 – 229 V</td>
<td>240 / 211 – 264 V</td>
</tr>
<tr>
<td>Extended output voltage range</td>
<td>133 / 150 / 166 – 250 V</td>
<td>153 / 173 / 192 – 288 V</td>
</tr>
<tr>
<td>Nominal frequency / range</td>
<td>60.0 / 59.3 – 60.5 Hz</td>
<td>60.0 / 59.3 – 60.5 Hz</td>
</tr>
<tr>
<td>Extended frequency range</td>
<td>54.22 – 66.75 Hz*</td>
<td>54.22 – 66.75 Hz*</td>
</tr>
<tr>
<td>Power factor</td>
<td>-0.6 to 0.6 programmable</td>
<td>-0.6 to 0.6 programmable</td>
</tr>
<tr>
<td>Maximum units per 30 A branch circuit</td>
<td>7 (14 modules)</td>
<td>8 (16 modules)</td>
</tr>
<tr>
<td>Maximum output overcurrent protection</td>
<td>6.3 A Fuse; 12A peak for 30 uSec</td>
<td>6.3 A Fuse; 12A peak for 30 uSec</td>
</tr>
</tbody>
</table>

## EFFICIENCY

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEC weighted efficiency</td>
<td>96.1 %</td>
</tr>
<tr>
<td>Peak inverter efficiency</td>
<td>96.7 %</td>
</tr>
<tr>
<td>Static MPPT efficiency (EN 50530)</td>
<td>99.9 % - 99.8 %</td>
</tr>
<tr>
<td>Night time power consumption</td>
<td>100 mW; Standby Reactive Current &lt; 200mA</td>
</tr>
</tbody>
</table>

## MECHANICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient temperature range</td>
<td>-40° C to +65° C</td>
</tr>
<tr>
<td>Dimension (W x H x D) including connectors</td>
<td>12” x 8” x 1.8”</td>
</tr>
<tr>
<td>Weight</td>
<td>1.81 kg (4.0 lbs)</td>
</tr>
<tr>
<td>Enclosure rating</td>
<td>NEMA 6</td>
</tr>
</tbody>
</table>

## FEATURES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Mesh Networked Power Line (130.2 kHz carrier)</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Monitoring via CP-100 gateway and Online Cloud</td>
</tr>
<tr>
<td>Certifications</td>
<td>UL1741, IEEE std 1547, IEEE std C62.41.2, CSA C22.2 NO. 107.1</td>
</tr>
<tr>
<td></td>
<td>CISPR 22 Class B; HECO Rule14H (Advanced Inverter), HECO Rule 22 (Self-Supply)</td>
</tr>
<tr>
<td></td>
<td>Rule 21 / UL1741SA; Complies with NEC 690.12 Rapid Shutdown</td>
</tr>
<tr>
<td></td>
<td>Product Warranty 25 Years</td>
</tr>
<tr>
<td>Compatibility (Single SKU)</td>
<td>2 x Series 60/72 Cell Mono or Poly PV modules</td>
</tr>
<tr>
<td></td>
<td>2 x Parallel HV Panasonic Modules; 2 x Parallel 96/128 Cell SunPower Modules</td>
</tr>
<tr>
<td></td>
<td>* Supports 50Hz operating with extended range (45.2 – 55.7 Hz)</td>
</tr>
</tbody>
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To learn more about Chilicon Power Microinverters, visit, chiliconpower.com