

# Champ Tower Online UPS Systems

1.0 / 2.0 / 3.0 KVA with internal battery, OPF 0.9  
LCD Display - Schuko Solution

## Features & Advantages

- True double-conversion
- Microprocessor control optimizes reliability
- Input power factor correction
- Output power factor 0.9
- Wide input voltage (120 V – 300 V)
- Converter mode available
- ECO mode for energy saving
- Generator compatible
- Smart SNMP works well with either USB or RS-232 together



3.0 kVA OPF 0.9



1kVA rear view  
Schuko



2kVA rear View  
Schuko



3kVA rear view  
Schuko



1.0/2.0 kVA OPF 0.9

### Backup Time Table for Champ Series Tower 1.0/2.0/3.0 kVA

| UPS                      | + Battery - Capacity                 | Backup Time ( Min : Sec ) |       |       |       |
|--------------------------|--------------------------------------|---------------------------|-------|-------|-------|
|                          |                                      | 100% L                    | 75% L | 50% L | 25% L |
| Champ 1 kVA<br>CH-1101TS | Inclusive internal Battery 24V/ 9 Ah | 3:30                      | 5:18  | 9:30  | 21:00 |
| Champ 2 kVA<br>CH-1102TS | Inclusive internal Battery 48V/ 9 Ah | 3:30                      | 5:42  | 10:30 | 23:00 |
| Champ 3 kVA<br>CH-1103TS | Inclusive internal Battery 72V/ 9 Ah | 4:00                      | 6:12  | 11:30 | 27:00 |

| P | Model      | kVA     | Form  | Datasheet           | Brochure            | Manual              | SNMP                       | Price Info                  |
|---|------------|---------|-------|---------------------|---------------------|---------------------|----------------------------|-----------------------------|
| 1 | CH-1101-TS | 1.0 kVA | Tower | <a href="#">PDF</a> | <a href="#">PDF</a> | <a href="#">PDF</a> | <a href="#">Go to SNMP</a> | <a href="#">Go to price</a> |
| 2 | CH-1102-TS | 2.0 kVA | Tower |                     |                     |                     |                            |                             |
| 3 | CH-1103-TS | 3.0 kVA | Tower |                     |                     |                     |                            |                             |

### Specification

| Model           | CH-1101TS          | CH-1102TS  | CH-1103TS      |
|-----------------|--------------------|--|----------------|
| Capacity        | 1 kVA / 900W       | 2 kVA / 1800 W   | 3 kVA / 2700 W |
| <b>Input</b>    |                    |  |                |
| Nominal Voltage |                    | 200/208/220/230/240VAC   |                |
| Voltage Range   | Low Line Transfer  | 195 VAC / 175 VAC / 155 VAC / 135 VAC ± 5 %<br>( based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0 ) |                |
|                 | Low Line Comeback  | 195 VAC / 175 VAC / 155 VAC / 135 VAC ± 5 %<br>( based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0 ) |                |
|                 | High Line Transfer | 300 VAC ± 5 % or 150 VAC ± 5 %   |                |
|                 | High Line Comeback | 290 VAC ± 5 % or 145 VAC ± 5 %   |                |
| Frequency Range |                    | 40Hz ~ 70 Hz   |                |

|   |  |   |                             |                 |
|---|--|---|-----------------------------|-----------------|
| <b>Phase</b>                                | Single phase with ground   |   |                             |                 |
| <b>Power Factor</b>                         | ≧ 0.99 @ Nominal Voltage 100% Load   |   |                             |                 |
| <b>Output</b>                               |  |   |                             |                 |
| <b>Output Voltage</b>                       | 200/208/220/230/240VAC   |   |                             |                 |
| <b>Voltage Regulation</b>                   | ± 1%   |   |                             |                 |
| <b>Frequency Range (Synchronized Range)</b> | 47~ 53 Hz  |   |                             |                 |
| <b>Frequency Range (Batt. Mode)</b>         | 50 Hz ± 0.5 %  |   |                             |                 |
| <b>Overload</b>                             | 100%~110%:audible warning 110%~130%: UPS shut down in 30 seconds at battery mode or transfer to bypass when the utility is normal ;>130%:UPS shuts down immediately at battery mode or transfer to bypass mode when the utility is normal<br>Current Crest Ratio |   |                             |                 |
| <b>Current Crest Ratio</b>                  | 3:1  |   |                             |                 |
| <b>Harmonic Distortion</b>                  | ≧ 3 % THD (Linear Load) ;<br>≧ 6 % THD (Non-linear Load)   |   |                             |                 |
| <b>AC to DC</b>                             | Zero   |   |                             |                 |
| <b>Inverter to Bypass</b>                   | 4 ms (Typical)   |   |                             |                 |
| <b>Waveform (Batt. Mode)</b>                | Pure Sinewave  |   |                             |                 |
| <b>Efficiency</b>                           |  |   |                             |                 |
| <b>To AC Mode</b>                           | 88%  | 89%   | 90%                         |                 |
| <b>To Battery Mode</b>                      | 83%  | 85%   | 88%                         |                 |
| <b>Battery</b>                              |  |   |                             |                 |
| <b>Standard Backup</b>                      | Battery Type   | 12 V / 9 Ah   | 12 V / 9 Ah                 | 12 V / 9 Ah     |
|   | Numbers  | 2   | 4                           | 6               |
|   | Typical Recharge Time  | 4 hours recover to 90% capacity   |                             |                 |
|   | Charging Current (max.)  | 1.0 A   |                             |                 |
|   | Charging Voltage   | 27.4 VDC ± 1%   | 54.7 VDC ±1%                | 82.1 VDC ±1%    |
| <b>Indicators</b>                           |  |   |                             |                 |
| <b>LCD or LED</b>                           |  | Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators |                             |                 |
| <b>Alarm</b>                                |  |   |                             |                 |
| <b>Battery Mode</b>                         | Sounding every 4 seconds   |   |                             |                 |
| <b>Low Battery</b>                          | Sounding every second  |   |                             |                 |
| <b>Overload</b>                             | Sounding twice every second  |   |                             |                 |
| <b>Fault</b>                                | Continuously sounding  |   |                             |                 |
| <b>AC Input &amp; Output Connector</b>      |  |   |                             |                 |
| <b>AC Input Connector</b>                   | 1 x IEC 320 C14  | 1 x IEC 320 C14   | 1 x IEC 320 C20             |                 |
| <b>AC Output Connector</b>                  | 3 x Schuko   | 3 x Schuko  | 4 x Schuko and 1 x Terminal |                 |
| <b>Standard</b>                             |  |   |                             |                 |
| <b>IEC 62040-1 ( Safety)</b>                | Yes  |   |                             |                 |
| <b>IEC-62040-2 ( EMC )</b>                  | Yes  |   |                             |                 |
| <b>CE</b>                                   | Yes  |   |                             |                 |
| <b>Physical</b>                             |  |   |                             |                 |
| <b>Standard Model</b>                       | <b>Dimension, D X W X H (mm)</b>   | 282 X 145 X 220   | 397 X 145 X 220             | 421 X 190 X 318 |
|   | <b>Net Weight (kgs)</b>  | 9.8   | 17                          | 27.6            |
| <b>Environment</b>                          |  |   |                             |                 |
| <b>Humidity</b>                             | 20-90 % RH @ 0 - 40°C (non-condensing)   |   |                             |                 |



|  |  |
|--|--|
| <b>Noise Level</b>   | Less than 50dBA @ 1 Meter  |
| <b>Management</b>  |  |
| <b>Smart RS-232/USB</b>  | Supports Windows 2000/2003/XP/Vista/2008/7, Linux, Unix, and MAC |
| <b>Optional SNMP</b>   | Power management from SNMP manager and web browser               |
| <ul style="list-style-type: none"><li>• Derate to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100/200/208VAC</li><li>• Product specifications are subject to change without further notice</li></ul> |  |