



## CompactPCI 6U 8HP 500 Watt DC power supply



### Product Description

Industry's leading CPCI power supply delivering 500W continuous power. Compliant with the PICMG 2.11. Telkoor's unique design using 2 converters in parallel – one for the 3.3V and one for the 5V enable max. current draw on the two outputs together.

**Telkoor Part Number:  
900-7003-0000**

### Product Specifications:

#### Input

<b>DC Input Voltage</b>	36-72 VDC
<b>Input Inrush Current</b>	20A max @48 VDC
<b>Input Reflected Ripple</b>	EN55022 Class B with the use of an external line filter
<b>Efficiency</b>	Full rated load 81% @ 48Vdc
<b>Input Line Protection</b>	Non-User Serviceable Fuse

#### Output

<b>V1 / Current</b>	+5VDC / 65A
<b>V2 / Current</b>	+3.3VDC / 80A
<b>V3 / Current</b>	+12VDC / 12A
<b>V4 / Current</b>	-12VDC / 1.5A
<b>Aux V / Current</b>	N/A
<b>Total Output Power</b>	500W with 300LFM forced air cooling
<b>Line Regulation</b>	+/- 0.5%
<b>Hot-Swap</b>	Internal O-ring Diode FET's
<b>Current Share</b>	Accuracy of shared current $\pm 10\%$ with up to 6 parallel units. Single

	wire current share on V1 & V2 for 50% to 100% load
<b>Remote Sense (Open sense lines protected)</b>	Available on V1 & V2. Total voltage compensation for cable losses with respect to the main output 400mV
<b>Over-Voltage Protection</b>	110% - 130% with latched shut down
<b>Short Circuit Protection</b>	Available on all outputs
<b>Temperature Protection</b>	System shutdown due to excessive internal temperature, automatic reset
<b>Load Regulation</b>	
<b>V1 &amp; V2</b>	+/- 1%
<b>V3</b>	+/- 4%
<b>V4</b>	+/- 4% with 1A minimum load on the 3.3V output
<b>Min. Load Requirement</b>	No
<b>Overshoot / Undershoot at Turn-on</b>	0% at turn ON
<b>Turn-on Delay</b>	1 Sec Max.
<b>Initial Setting Accuracy</b>	+/- 1%
<b>Voltage Set Point (Internal trim-pot) V1 / V2</b>	+/- 4%
<b>Ripple @ Noise with 20MHz Bandwidth measured across 120µF Load Capacitor Paralleled with 1µF Ceramic Cap.</b>	
<b>V1</b>	100mV p-p
<b>V2</b>	60mV p-p
<b>V3 &amp; V4</b>	
<b>Overload Protection</b>	
<b>V1 &amp; V2</b>	130% Max.
<b>V3&amp; V4</b>	150% Max.

## Environmental

<b>Temperature</b>	
<b>Operation</b>	Operation: -5°C to +55°C full load with 300LFM Forced Air Cooling and de-rating linearly above 55°C by 2.5% per °C
<b>Storage</b>	-40°C to +85°C
<b>Humidity</b>	Up to 95% RH Non-Condensing
<b>Shock &amp; Vibration</b>	Shock: Peak acceleration 10GPK max. Vibration: Random vibration, 10Hz to 500Hz, 3 axis 1.9GRMS max.
<b>Conducted &amp; Radiated Emission</b>	EN55022/CISPR22 Class B with an external TBD line filter
<b>Altitude</b>	Operation 6,000 ft Non operation 40,000 ft.
<b>Surge</b>	EN61000-4-5
<b>MTBF</b>	400,000 Hours per Belcore Standard B332 Gb 30°
<b>Dielectric Isolation</b>	
<b>Input to Case</b>	1500Vdc.

<b>Input to Output</b>	1500Vdc.
<b>Output to Case</b>	100Vdc.

## Safety, Regulations and EMI Specifications

<b>Safety Approvals</b>	UL60950, EN60950 & CE marking
<b>Dielectric Withstand Voltage</b>	1500VDC Input to Output, 1500VDC Input to case, 100VDC Output to case
<b>ESD Susceptibility</b>	EN61000-4-2 level 4 8KV air
<b>Radiated Susceptibility</b>	EN61000-4-3 level 3 10V/m
<b>EFT / Burst</b>	EN61000-4-4 level 3 ±2KV
<b>Input Surge</b>	EN61000-4-5 level 3 line-to-line 1KV line to chassis 2KV
<b>Conducted Disturbance</b>	EN61000-4-6 level 2 3Vrms
<b>Power frequency magnetic field</b>	EN61000-4-8 3A/m

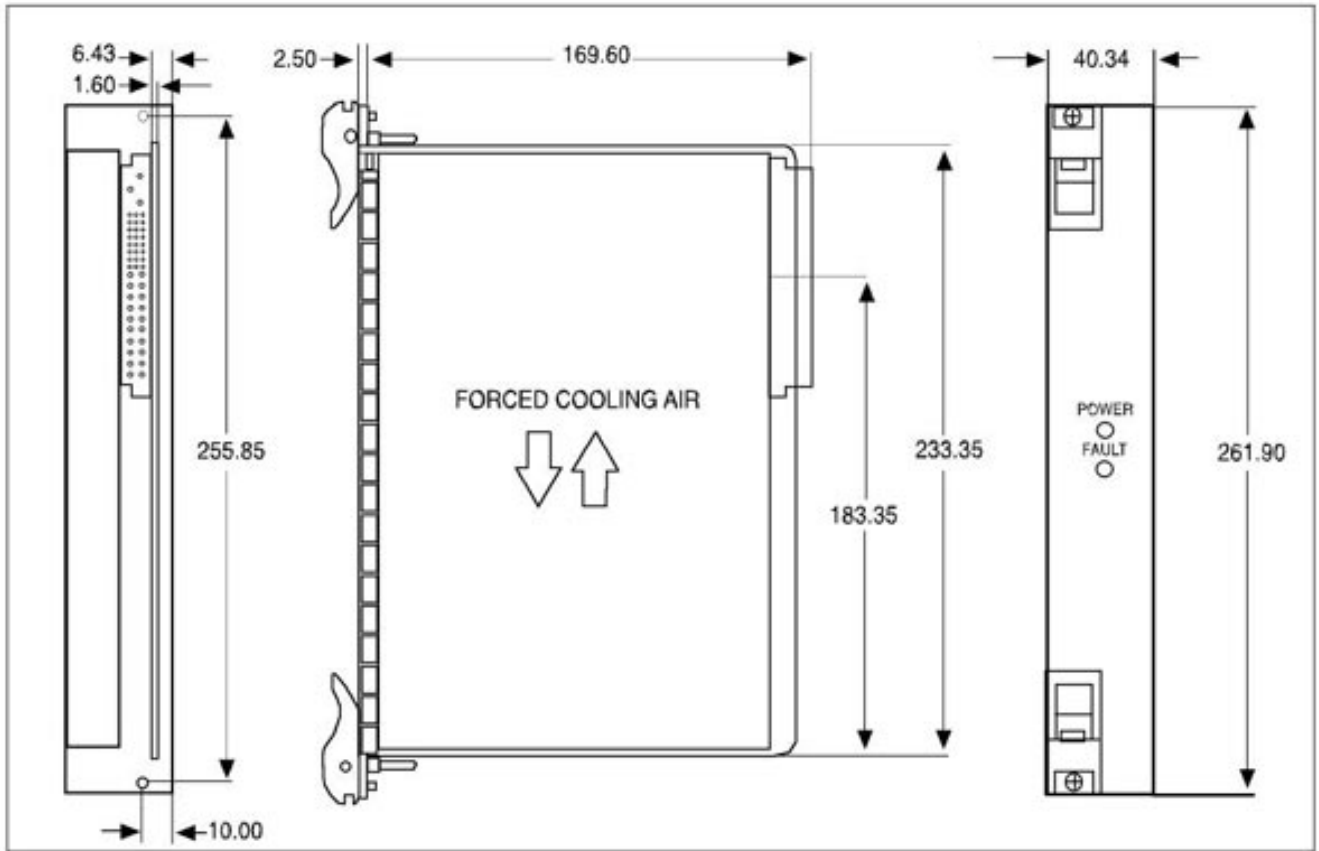
## Monitoring Command & Control

<b>Remote</b>	N/A
<b>Inhibit</b>	TTL Compatible
<b>Power FAIL</b>	Open collector - Active low signal.
<b>Current Share</b>	Accuracy of shared current ±10% with up to 6 parallel units. Single wire current share on V1 & V2 for 50% to 100% load
<b>DEG #</b>	Open Collector Activated LOW 10°C before Thermal Shut-Down
<b>Input AC Connector</b>	Standard PICMG 47 Pin Positronics
<b>Remote Sense</b>	On V1 & V2 for Cable Loss Correction of up to 400mV
<b>Output Connectors V1/ V2</b>	Standard PICMG 47 Pin Positronics
<b>Output Connectors V3/ V4</b>	Standard PICMG 47 Pin Positronics
<b>Aux. Output</b>	N/A
<b>I<sup>2</sup>C Data Bus (optional)</b>	Yes for Pre-Programmed Static Parameters
<b>Front Panel Green LED</b>	Inputs OK
<b>Front Panel RED LED</b>	Output Failure

## Mechanical Dimensions

<b>Size</b>	6U High 8HP wide 169.4 mm Deep
<b>Weight</b>	1500 gr
<b>Cover</b>	N/A

## Outline Drawing



All characteristics are subject to change without prior notice.