

VEROTEC

Electronics Packaging



Power Supplies

CUSTOM POWER SUPPLIES

TecServ+ is the vehicle by which Verotec delivers its value added services. These fall within 5 main categories and are described below. When it comes to power supplies, we've worked with many customers in the past to design, manufacture and help bring to market modified and custom versions of our standard products – a small selection of these are pictured below. If you have any special power supply requirements, please contact our sales office.



ENGINEERING SERVICES:

- + Complete review of commercial, electro-mechanical, environmental and regulatory product requirements with customer.
- + Import of STEP, IGES, DWG & DXF file formats
- + Mechanical and electrical design using latest CAD software
- + 3D Modelling to allow conceptual testing before production
- + Component selection from a vast library of parts

MANUFACTURING SERVICES:

- + Prototype / pre-production samples using small batch shop
- + Modification of standard catalogue products (including machining, CNC punching, laser cutting, painting & silk-screening)
- + Manufacture of custom / bespoke products (including fabrication, machining, CNC punching, plating, painting & silk-screening)
- + Assembly & kitting of components
- + Integration & mechanical / electrical testing of complex systems

COMPLIANCE SERVICES:

- + Validation of product design and/or specification
- + Advice on environment legislation (RoHS, Reach, Weee etc.)
- + In-house pre-compliance testing for CE marking (Safety, EMC)
- + Supply of product technical construction file
- + Testing & certification of a product at an approved test house (for EMC, shock & vibration, altitude, temperature, humidity etc.)

LOGISTICAL SERVICES:

- + Express manufacturing service for quick turnaround of urgent orders
- + Special / bespoke packaging for safe transport of goods
- + Scheduled orders (including JIT and KAN BAN systems)
- + Stock holding & distribution
- + Exporting (including export packaging, land/sea/air transportation, freight forwarding, customs documentation & shipping manifests)

PROJECT MANAGEMENT SERVICES:

- + Initial project consultation
- + Capability and feasibility study
- + Estimation of project cost and leadtime
- + Management of design process (specification to validation)
- + Management of manufacturing process (prototype to production)
- + Cost reduction programmes throughout product life cycle



Customised GK300 PSU with 80dB screening, high airflow & fully DSP regulated converter – MRI Scanner application.



Customised VP rack PSU with modular construction and remote signalling / monitoring – air traffic control application



Bespoke, 1U/19" PSU with RS485 & Ethernet interface for monitoring and control functions – telecoms application.



Customised VP60 PSU – low cost design with wide AC & DC input and hot-swap functionality - traffic signalling application.

COMPACT PCI 3U SERIES

200W AC/DC & DC/DC 11.04 - 11.09

300W AC/DC & DC/DC 11.10 - 11.15

COMPACT PCI 6U SERIES

350W AC/DC & DC/DC 11.16 - 11.17

400W AC/DC & DC/DC 11.18 - 11.21

500W AC/DC & DC/DC 11.22 - 11.25



AC/DC CONVERTERS · PK-SERIES

PK MONOVOLT 11.26 - 11.28

PK BIVOLT 11.29 - 11.30

PK TRIVOLT 11.31 - 11.33

AC/DC CONVERTERS WITH PFC · VP-SERIES

VP 20 11.34

VP40 11.35

VP50 11.36

VP80 11.37- 11.40

VP150 11.41 - 11.43



AC/DC CONVERTERS ECONOMY · EC-SERIES

EC MONOVOLT 11.44

EC TRIVOLT 11.45 -11.47



DC/DC CONVERTERS · GK-SERIES

GK MONOVOLT 11.48 - 11.50

GK BIVOLT 11.51 - 11.52

GK TRIVOLT 11.53 - 11.54



CompactPCI 3U 8HP 200 WATT AC POWER SUPPLY

FEATURES

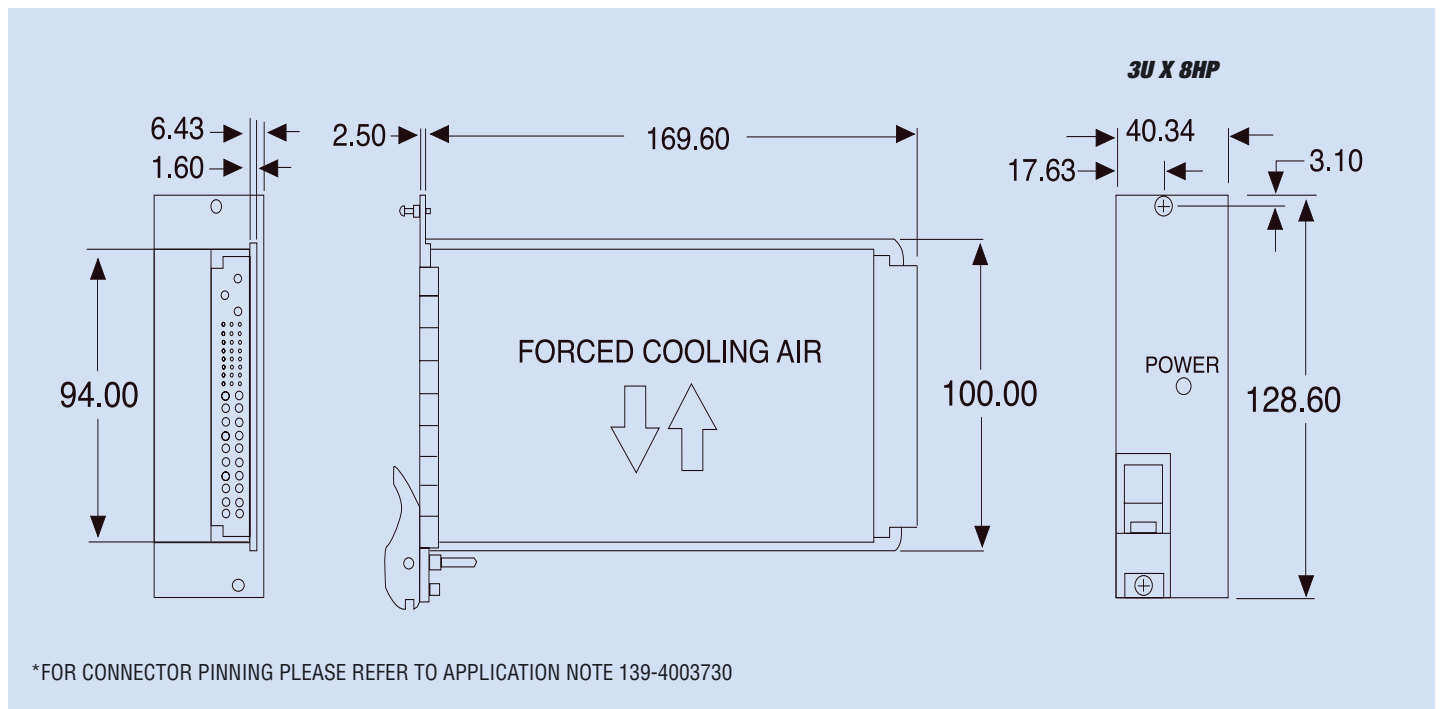
- 200W output power
- Efficiency - better than 81% @ High line
- 85-264VAC Wide-Range Input with Unity PFC
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- On board E2PROM for PS H/W configuration

Description	Ordercode
200W, 3U, AC CPCI PSU (Horizontal Overlay)	925-4004121
200W, 3U, AC CPCI PSU (Vertical Overlay)	925-4004127



INPUT	
AC Input Voltage	85-264VAC Wide Range
DC Input Voltage	
Input Frequency Range	47 - 63 Hz (400Hz Option)
Input Inrush Current	Cold Start 30A @ 110VAC & 60A @ 230VAC
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Active Power Factor Correction	EN 61000-2-3 >0.95
Efficiency @ 230VAC Full Load	81% Typical
Efficiency @ 115VAC Full Load	79% Typical
Efficiency @ 48/24VDC Full Load	
Input Line Protection	Non-User Serviceable Fuse
Hold-up Time	20mSec @ Full Load
OUTPUT	
V1/Current	+5VDC / 25A
V2/Current	+3.3VDC / 36A
V3/Current	+12VDC / 3A
V4/Current	-12VDC / 0.5A
Total Output Power	200W with 250LFM
Line Regulation	+/- 0.5%
Load Regulation	
V1&V2	+/- 1%
V3&V4	+/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	2Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot) V1/V2	+/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
+5VDC	60mV p-p
+3.3VDC	60mV p-p
+/- 12VDC	120mV p-p
Hot-Swap	Yes
Current Share	Single Wire - on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50% max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
V1 & V2	125% Max.
V3	200% Max.
V4	250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery

CompactPCI 3U 8HP 200 WATT AC POWER SUPPLY



ENVIRONMENTAL

Temperature	
Operation	-5C to +55C with 250LFM Forced Air Cooling
Storage	-40C to +85C
Cooling	250LFM Forced Air Cooling
Humidity	Up to 95% RH Non-Condensing
Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter
Surge, Spikes & Lightning Protection	EN61000-4
Dielectric Isolation	
Input to Case	1500Vrms
Input to Output	3000Vrms
Output to Case	100Vdc
MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C

SAFETY REGULATIONS & EMI SPECIFICATIONS

Safety Approvals	UL60950, EN60950, cUL & CE Marking
Dielectric Withstand Voltage	4200VDC Input to Output, 2121VDC Input to Chassis Ground
ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
Radiated Susceptibility	EN61000-4-3 10V/m
EFT/Burst	EN61000-4-4 1Kv
Input Surge	EN61000-4-5 1Kv L-L 2Kv L-Gnd
Conducted Disturbance	EN61000-4-6 3Vrms
Power frequency magnetic field	EN610000-4-8 1A/m
Immunity for voltage Dips	EN61000-4-11

MONITORING COMMAND & CONTRL

Inhibit (INH #)	Open Collector Inhibited with GND.
Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
Connector	Standard PICMG 47 Pin Positronics
I2C Data Bus	Yes for Pre-Programmed Static Parameters
LED Indications:	One Bi-Color
Front Panel Green LED	Outputs OK
Front Panel Red LED	Outputs Failure

MECHANICAL DIMENSIONS

Size	3U High 8HP wide 169.6mm Deep
Weight	0.8KG

CompactPCI 3U 8HP 200 WATT 48VDC POWER SUPPLY

FEATURES

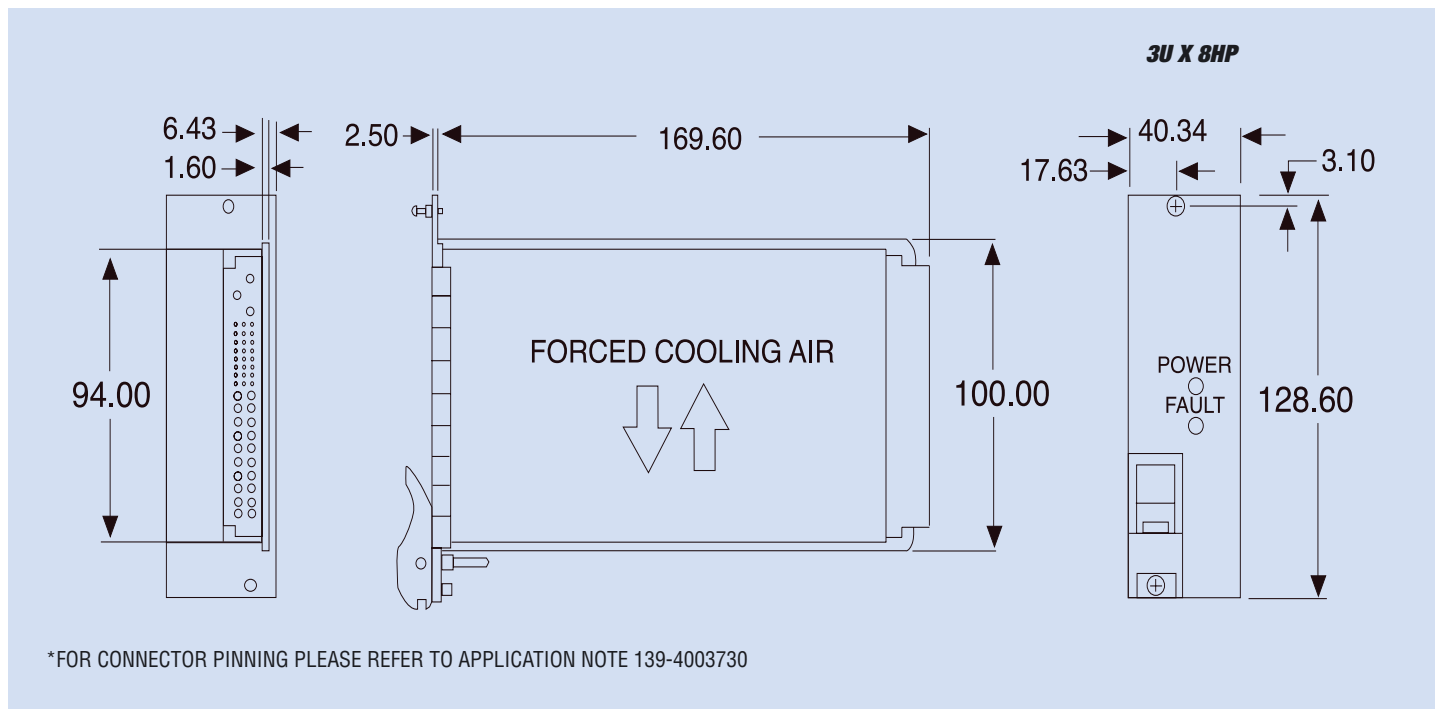
- 200W output power
- Efficiency - better than 83%
- 36-72VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- On board E2PROM for PS H/W configuration

Description	Ordercode
200W, 3U, 48VDC CPCI PSU (Horizontal Overlay)	925-4004122
200W, 3U, 48VDC CPCI PSU (Vertical Overlay)	925-4004128



INPUT	AC Input Voltage		
	DC Input Voltage	36 - 72 VDC	
	Input Frequency Range		
	Input Inrush Current	20A Max	
	Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter	
	Active Power Factor Correction		
	Efficiency @ 230VAC Full Load		
	Efficiency @ 115VAC Full Load		
	Efficiency @ 48/24VDC Full Load	83% @ 48VDC	
	Input Line Protection	Non-User Serviceable Fuse	
	Hold-up Time		
	OUTPUT	V1/Current	+5VDC / 25A
		V2/Current	+3.3VDC / 36A
V3/Current		+12VDC / 3A	
V4/Current		-12VDC / 0.5A	
Total Output Power		200W with 250LFM	
Line Regulation		+/- 0.5%	
Load Regulation			
		V1&V2	+/- 1%
		V3&V4	+/- 5%
Min. Load Requirement		No	
Overshoot/Undershoot at Turn-On		Less than 1%	
Turn-On Delay		1Sec Max.	
Initial Setting Accuracy		+/- 0.4% for V1 & V2 +/- 2% for V3 & V4	
Voltage Set point (Internal trim-pot) V1/V2		+/- 5%	
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.			
		+5VDC	60mV p-p
		+3.3VDC	60mV p-p
		+/- 12VDC	120mV p-p
Hot-Swap		Yes	
Current Share		Single Wire - on V1 & V2	
Remote Sense (Open sense lines protected)		On +5VDC & +3.3VDC	
Long Term Stability		0.1% over 10 Hours after 10min. Warm Up	
Transient Response		For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.	
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down		
Overload Protection			
	V1 & V2	125% Max.	
	V3	200% Max.	
	V4	250% Max.	
Short Circuit Protection	Available On All Outputs		
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery		

CompactPCI 3U 8HP 200 WATT 48VDC POWER SUPPLY



ENVIRONMENTAL	Temperature	
	Operation	-5C to +55C with 250LFM Forced Air Cooling
	Storage	-40C to +85C
	Cooling	250LFM Forced Air Cooling
	Humidity	Up to 95% RH Non-Condensing
	Shock & Vibration Storage:	EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2
	Transportation class 2.3,	EN 300 019-2-3 Use class 3.3
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with input filter
	Surge, Spikes & Lightning Protection	EN61000-4
	Dielectric Isolation	
	Input to Case	1500Vdc
	Input to Output	1500Vdc
	Output to Case	100Vdc
	MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C
SAFETY	Safety Approvals	UL60950, EN60950, cUL & CE Marking
REGULATIONS	Dielectric Withstand Voltage	1500VDC Input to Output, 1500VDC Input to Chassis Ground
& EMI	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
SPECIFICATIONS	Radiated Susceptibility	EN61000-4-3 10V/m
	EFT/Burst	EN61000-4-4 1Kv
	Input Surge	
	Conducted Disturbance	EN61000-4-6 3Vrms
	Power frequency magnetic field	EN61000-4-8 1A/m
	Immunity for voltage Dips	
MONITORING	Inhibit (INH #)	Open Collector Inhibited with GND.
COMMAND &	Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
CONTROL	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
	Connector	Standard PICMG 47 Pin Positronics
	I2C Data Bus	Yes for Pre-Programmed Static Parameters
	LED Indications:	Two LED Indicators
	Front Panel Green LED	Outputs OK
	Front Panel Red LED	Outputs Failure
MECHANICAL	Size	3U High 8HP wide 169.6mm Deep
DIMENSIONS	Weight	0.8KG

CompactPCI 3U 8HP 200 WATT 24VDC POWER SUPPLY

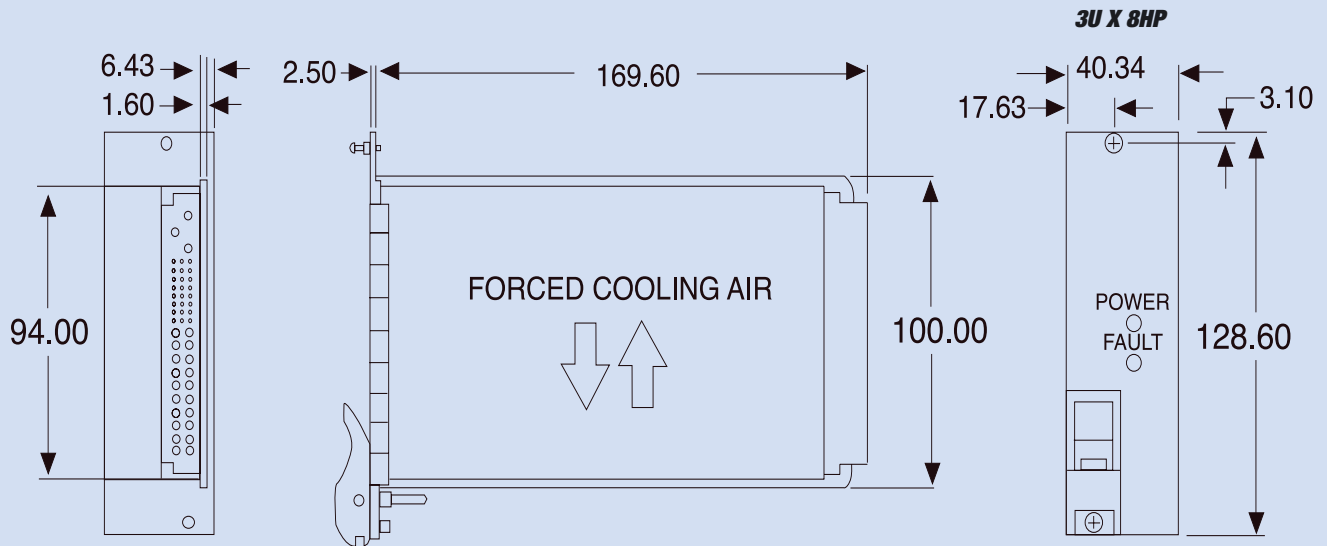
FEATURES

- 200W output power
- Efficiency - better than 78%
- 18-36VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- "Hot-Swap" Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- On board E2PROM for PS H/W configuration

Description	Ordercode
200W, 3U, 24VDC CPCI PSU (Horizontal Overlay)	925-4004123
200W, 3U, 24VDC CPCI PSU (Vertical Overlay)	925-4004129



INPUT	
AC Input Voltage	
DC Input Voltage	18 - 36 VDC
Input Frequency Range	
Input Inrush Current	20A Max
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Active Power Factor Correction	
Efficiency @ 230VAC Full Load	
Efficiency @ 115VAC Full Load	
Efficiency @ 48/24VDC Full Load	82% @ 24VDC
Input Line Protection	Non-User Serviceable Fuse
Hold-up Time	
OUTPUT	
V1/Current +5VDC / 25A	
V2/Current	+3.3VDC / 36A
V3/Current	+12VDC / 3A
V4/Current	-12VDC / 0.5A
Total Output Power 200W with 250LFM	
Line Regulation	+/- 0.5%
Load Regulation	
V1 & V2	+/- 1%
V3 & V4	+/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	1Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot) V1/V2	+/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
+5VDC	60mV p-p
+3.3VDC	60mV p-p
+/- 12VDC	120mV p-p
Hot-Swap	Yes
Current Share	Single Wire - on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
V1 & V2	125% Max.
V3	200% Max.
V4	250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery



*FOR CONNECTOR PINNING PLEASE REFER TO APPLICATION NOTE 139-4003730

ENVIRONMENTAL	Temperature		
		Operation	-5C to +55C with 250LFM Forced Air Cooling
		Storage	-40C to +85C
		Cooling	250LFM Forced Air Cooling
		Humidity	Up to 95% RH Non-Condensing
		Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
		Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with input filter
		Surge, Spikes & Lightning Protection	EN61000-4
		Dielectric Isolation	
		Input to Case	1500Vdc
	Input to Output	1500Vdc	
	Output to Case	100Vdc	
	MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C	
SAFETY REGULATIONS & EMI SPECIFICATIONS	Safety Approvals	UL60950, EN60950, UL1604, cUL & CE Marking	
	Dielectric Withstand Voltage	1500VDC Input to Output, 1500VDC Input to Chassis Ground	
	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air	
	Radiated Susceptibility	EN61000-4-3 10V/m	
	EFT/Burst	EN61000-4-4 1Kv	
	Input Surge		
	Conducted Disturbance	EN61000-4-6 3Vrms	
	Power frequency magnetic field	EN610000-4-8 1A/m	
Immunity for voltage Dips			
MONITORING COMMAND & CONTROL	Inhibit (INH #)	Open Collector Inhibited with GND.	
	Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range	
	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit	
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV	
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down	
	Connector	Standard PICMG 47 Pin Positronics	
	I2C Data Bus	Yes for Pre-Programmed Static Parameters	
	LED Indications:	Two LED Indicators	
		Front Panel Green	LED Outputs OK
		Front Panel Red	LED Outputs Failure
MECHANICAL DIMENSIONS	Size	3U High 8HP wide 169.6mm Deep	
	Weight	0.8KG .	

CompactPCI 3U 8HP 300 WATT AC POWER SUPPLY

FEATURES

- 300W output power
- Efficiency - better than 81% @ High line
- 85-264VAC Wide-Range Input with Unity PFC
- Operation Temp. -5°C to +55 °C – No De-rating
- "Hot-Swap" Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- On board E2PROM for PS H/W configuration

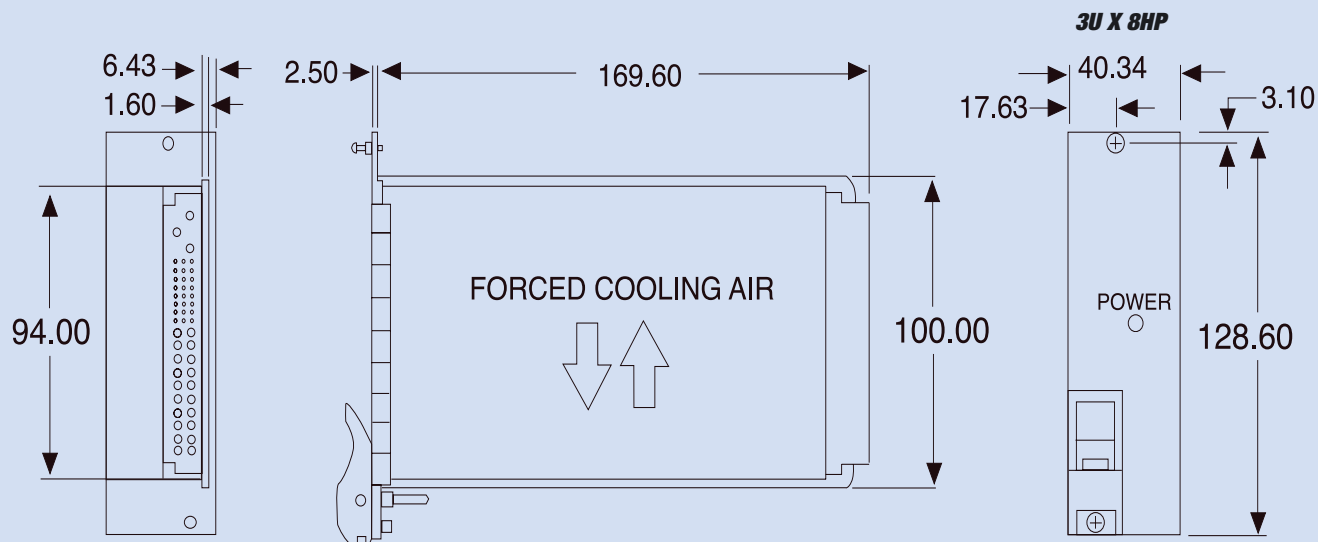


CompactPCI 3U 8HP 300 WATT AC POWER SUPPLY

Description	Ordercode
300W, 3U, AC CPCI PSU (Horizontal Overlay)	925-4004124
300W, 3U, AC CPCI PSU (Vertical Overlay)	925-4004130

INPUT	AC Input Voltage	85-264VAC Wide Range	
	DC Input Voltage		
	Input Frequency Range	47 - 63 Hz (400Hz Option)	
	Input Inrush Current	Cold Start 16A @ 110VAC & 60A @ 230VAC	
	Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter	
	Active Power Factor Correction	EN 61000-2-3 >0.95	
	Efficiency @ 230VAC Full Load	81% Typical	
	Efficiency @ 115VAC Full Load	79% Typical	
	Efficiency @ 48/24VDC Full Load		
	Input Line Protection	Non-User Serviceable Fuse	
	Hold-up Time	20mSec @ Full Load	
	OUTPUT	V1/Current	+5VDC / 30A
		V2/Current	+3.3VDC / 40A
V3/Current		+12VDC /5A	
V4/Current		-12VDC /1A	
Total Output Power		300W with 250LFM	
Line Regulation		+/- 0.5%	
Load Regulation			
		V1&V2	+/- 1%
		V3&V4	+/- 5%
Min. Load Requirement		No	
Overshoot/Undershoot at Turn-On		Less than 1%	
Turn-On Delay		2Sec Max.	
Initial Setting Accuracy		+/- 0.4% for V1 & V2 +/- 2% for V3 & V4	
Voltage Set point (Internal trim-pot) V1/V2		+/- 5%	
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.			
		+5VDC	60mV p-p
		+3.3VDC	60mV p-p
		+/- 12VDC	120mV p-p
Hot-Swap		Yes	
Current Share		Single Wire - on V1 & V2	
Remote Sense (Open sense lines protected)		On +5VDC & +3.3VDC	
Long Term Stability		0.1% over 10 Hours after 10min. Warm Up	
Transient Response		For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.	
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down		
Overload Protection			
	V1 & V2	125% Max.	
	V3	200% Max.	
	V4	250% Max.	
Short Circuit Protection	Available On All Outputs		
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery		

CompactPCI 3U 8HP 300 WATT AC POWER SUPPLY



*FOR CONNECTOR PINNING PLEASE REFER TO APPLICATION NOTE 139-4003730

ENVIRONMENTAL	Temperature	
	Operation	-5C to +55C with 250LFM Forced Air Cooling
	Storage	-40C to +85C
	Cooling	250LFM Forced Air Cooling
	Humidity	Up to 95% RH Non-Condensing
	Shock & Vibration Storage:	EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter
	Surge, Spikes & Lightning Protection	EN61000-4
	Dielectric Isolation	
	Input to Case	1500Vrms
Input to Output	3000Vrms	
Output to Case	100Vdc	
MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C	
SAFETY REGULATIONS & EMI SPECIFICATIONS	Safety Approvals	Designed to comply with UL60950, EN60950, cUL & CE Marking
	Dielectric Withstand Voltage	4200VDC Input to Output, 2121VDC Input to Chassis Ground
	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
	Radiated Susceptibility	EN61000-4-3 10V/m
	EFT/Burst	EN61000-4-4 1Kv
	Input Surge	EN61000-4-5 1Kv L-L 2Kv L-Gnd
	Conducted Disturbance	EN61000-4-6 3Vrms
	Power frequency magnetic field	EN610000-4-8 1A/m
	Immunity for voltage Dips	EN61000-4-11
	Inhibit (INH #)	Open Collector Inhibited with GND.
Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range	
Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit	
Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV	
Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down	
Connector	Standard PICMG 47 Pin Positronics	
I2C Data Bus	Yes for Pre-Programmed Static Parameters	
LED Indications:	One Bi-Color	
Front Panel Green	LED Outputs OK	
Front Panel Red	LED Outputs Failure	
MECHANICAL DIMENSIONS	Size	3U High 8HP wide 169.6mm Deep
	Weight	0.8KG

CompactPCI 3U 8HP 300 WATT 48VDC POWER SUPPLY

FEATURES

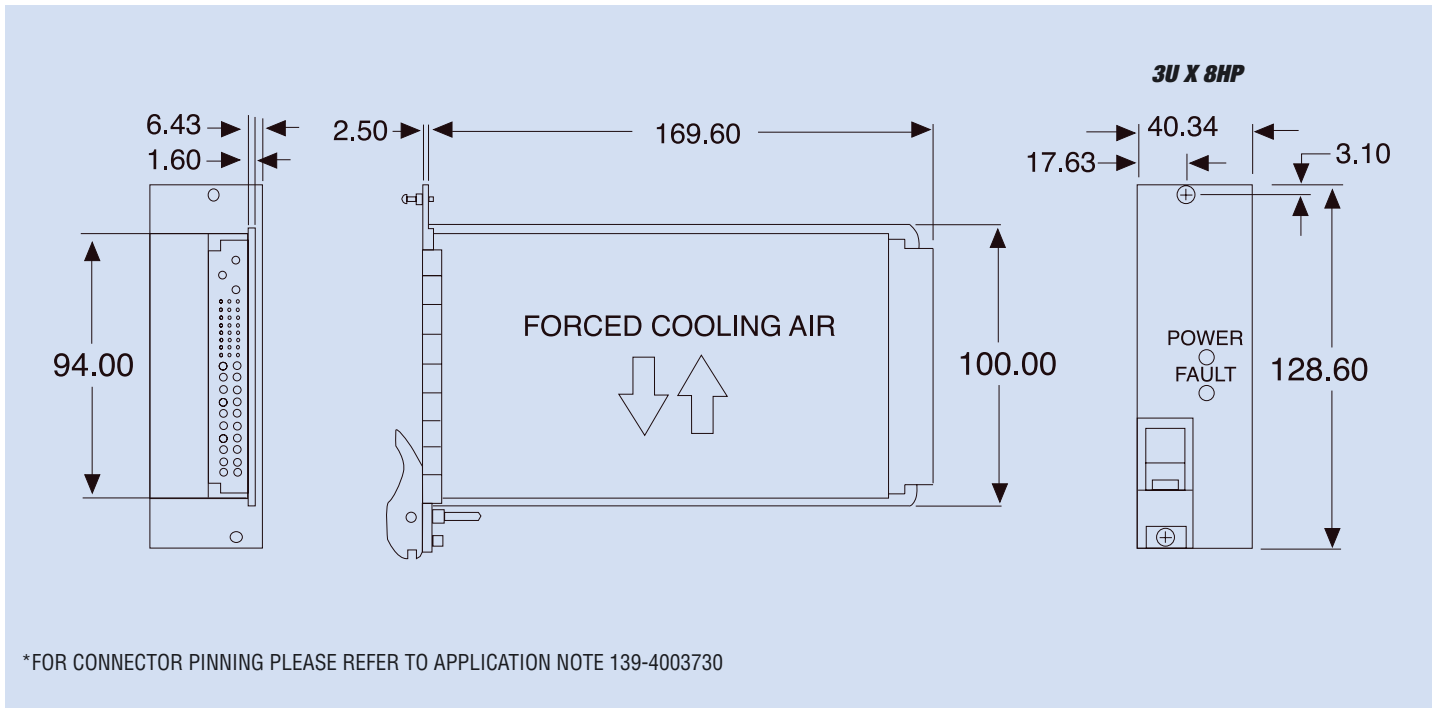
- 300W output power
- Efficiency - better than 83%
- 36-72VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- "Hot-Swap" Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- On board E2PROM for PS H/W configuration



CompactPCI 3U 8HP 300 WATT 48VDC POWER SUPPLY

Description	Ordercode
300W, 3U, 48V DC CPCI PSU (Horizontal Overlay)	925-4004125
300W, 3U, 48V DC CPCI PSU (Vertical Overlay)	925-4004131

INPUT	
AC Input Voltage	
DC Input Voltage	36 - 72 VDC
Input Frequency Range	
Input Inrush Current	20A Max
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Active Power Factor Correction	
Efficiency @ 230VAC Full Load	
Efficiency @ 115VAC Full Load	
Efficiency @ 48/24VDC Full Load	83% @ 48VDC
Input Line Protection	Non-User Serviceable Fuse
Hold-up Time	
OUTPUT	
V1/Current	+5VDC / 30A
V2/Current	+3.3VDC / 40A
V3/Current	+12VDC /5A
V4/Current	-12VDC /1A
Total Output Power	300W with 250LFM
Line Regulation	+/- 0.5%
Load Regulation	
V1&V2	+/- 1%
V3&V4	+/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	1Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot) V1/V2	+/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
+5VDC	60mV p-p
+3.3VDC	60mV p-p
+/- 12VDC	120mV p-p
Hot-Swap	Yes
Current Share Single Wire -	on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
	V1 & V2 125% Max.
	V3 200% Max.
	V4 250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery



ENVIRONMENTAL	Temperature		
		Operation	-5C to +55C with 250LFM Forced Air Cooling
		Storage	-40C to +85C
	Cooling		250LFM Forced Air Cooling
	Humidity		Up to 95% RH Non-Condensing
	Shock & Vibration		Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2
	Transportation		class 2.3, EN 300 019-2-3 Use class 3.3
	Conducted & Radiated		Emission EN55022 Class B and EN-61000. Measured with input filter
	Surge, Spikes & Lightning Protection		EN61000-4
	Dielectric Isolation		
	Input to Case	1500Vdc	
	Input to Output	1500Vdc	
	Output to Case	100Vdc	
	MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C	
SAFETY REGULATIONS & EMI SPECIFICATIONS	Safety Approvals		UL60950, EN60950, cUL & CE Marking
	Dielectric Withstand Voltage		1500VDC Input to Output, 1500VDC Input to Chassis Ground
	ESD Susceptibility		EN61000-4-2 4Kv Contact 8Kv Air
	Radiated Susceptibility		EN61000-4-3 10V/m
	EFT/Burst		EN61000-4-4 1Kv
	Input Surge		
	Conducted Disturbance		EN61000-4-6 3Vrms
	Power frequency magnetic field		EN610000-4-8 1A/m
	Immunity for voltage Dips		
MONITORING COMMAND & CONTROL	Inhibit (INH #)		Open Collector Inhibited with GND.
	Power FAIL (FLT#)		Open Collector LOW Signal Indicates Outputs Out of Range
	Current Share		On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
	Remote Sense		On V1 & V2 for Cable Loss Correction of up to 300mV
	Degradation (DEG #)		Open Collector Activated LOW before Thermal Shut-Down
	Connector		Standard PICMG 47 Pin Positronics
	I2C Data Bus		Yes for Pre-Programmed Static Parameters
	LED Indications:		Two LED Indicators
		Front Panel Green	
	Front Panel Red		LED Outputs Failure
MECHANICAL DIMENSIONS	Size		3U High 8HP wide 169.6mm Deep
	Weight		0.8KG

CompactPCI 3U 8HP 300 WATT 24VDC POWER SUPPLY

FEATURES

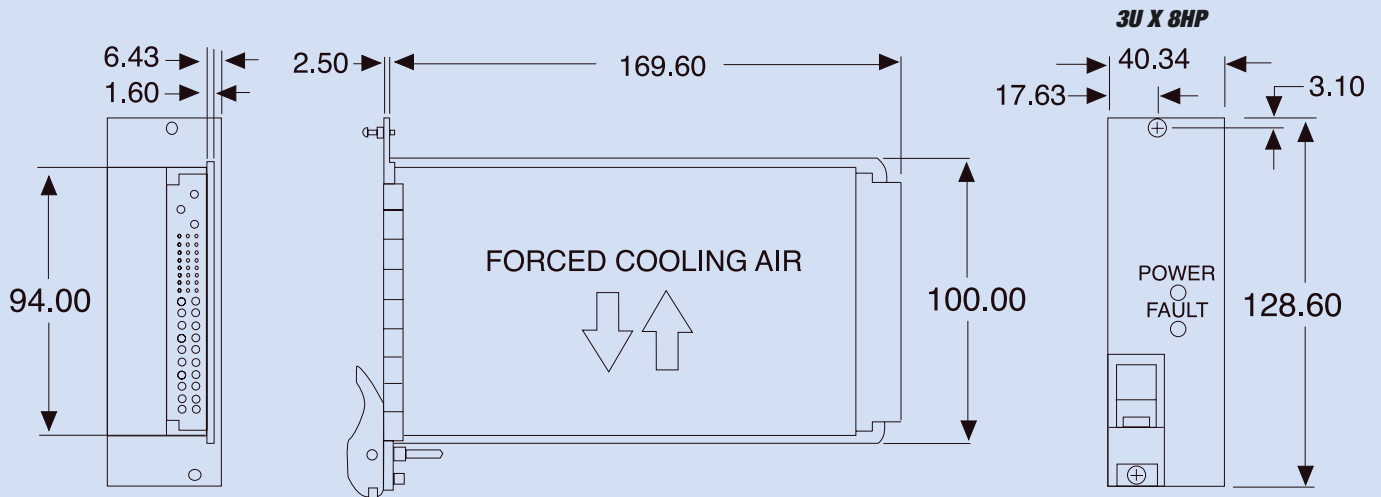
- 300W output power
- Efficiency - better than 78%
- 18-36VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- On board E2PROM for PS H/W configuration



CompactPCI 3U 8HP 300 WATT 24VDC POWER SUPPLY

Description	Ordercode
300W, 3U, 24VDC CPCI PSU (Horizontal Overlay)	925-4004126
300W, 3U, 24VDC CPCI PSU (Vertical Overlay)	925-4004132

INPUT	
AC Input Voltage	
DC Input Voltage	18 - 36 VDC
Input Frequency Range	
Input Inrush Current	20A Max
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Power Factor Correction	
Efficiency @ 230VAC Full Load	
Efficiency @ 115VAC Full Load	
Efficiency @ 48/24VDC Full Load	82% @ 24VDC
Input Line Protection	Non-User Serviceable Fuse
Hold-up Time	
OUTPUT	
V1/Current	+5VDC / 25A
V2/Current	+3.3VDC / 36A
V3/Current	+12VDC / 5A
V4/Current	-12VDC / 0.5A
Total Output Power	300W with 250LFM
Line Regulation	+/- 0.5%
Load Regulation	
	V1&V2 +/- 1%
	V3&V4 +/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	1Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot) V1/V2	+/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
	+5VDC 60mV p-p
	+3.3VDC 60mV p-p
	+/- 12VDC 120mV p-p
Hot-Swap	Yes
Current Share Single Wire -	on V1 & V2
Remote Sense (Open sense lines protected) On	+5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage	Protection 110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
	V1 & V2 125% Max.
	V3 150% Max.
	V4 250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery



*FOR CONNECTOR PINNING PLEASE REFER TO APPLICATION NOTE 139-4003730

ENVIRONMENTAL	Temperature	
	Operation	-5C to +55C with 250LFM Forced Air Cooling
	Storage	-40C to +85C
	Cooling	250LFM Forced Air Cooling
	Humidity	Up to 95% RH Non-Condensing
	Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with input filter
	Surge, Spikes & Lightning Protection	EN61000-4
	Dielectric Isolation	
	Input to Case	1500Vdc
Input to Output	1500Vdc	
Output to Case	100Vdc	
MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C	
SAFETY REGULATIONS & EMI SPECIFICATIONS	Safety Approvals	Designed to meet UL60950, EN60950, UL1604, cUL & CE Marking
	Dielectric Withstand Voltage	1500VDC Input to Output, 1500VDC Input to Chassis Ground
	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
	Radiated Susceptibility	EN61000-4-3 10V/m
	EFT/Burst	EN61000-4-4 1Kv
	Input Surge	
	Conducted Disturbance	EN61000-4-6 3Vrms
	Power frequency magnetic field	EN610000-4-8 1A/m
	Immunity for voltage Dips	
MONITORING COMMAND & CONTROL	Inhibit (INH #)	Open Collector Inhibited with GND.
	Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
	Connector	Standard PICMG 47 Pin Positronics
	I2C Data Bus	Yes for Pre-Programmed Static Parameters
	LED Indications:	Two LED Indicators
	Front Panel Green	LED Outputs OK
	Front Panel Red	LED Outputs Failure
MECHANICAL DIMENSIONS	Size	3U High 8HP wide 169.6mm Deep
	Weight	0.8KG

CompactPCI 6U 8HP 350 WATT 24VDC POWER SUPPLY

FEATURES

- 350W output power
- Efficiency - better than 79%
- 18-36VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- "Hot-Swap" Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- I2C Data Bus (optional) for PSU Hardware configuration

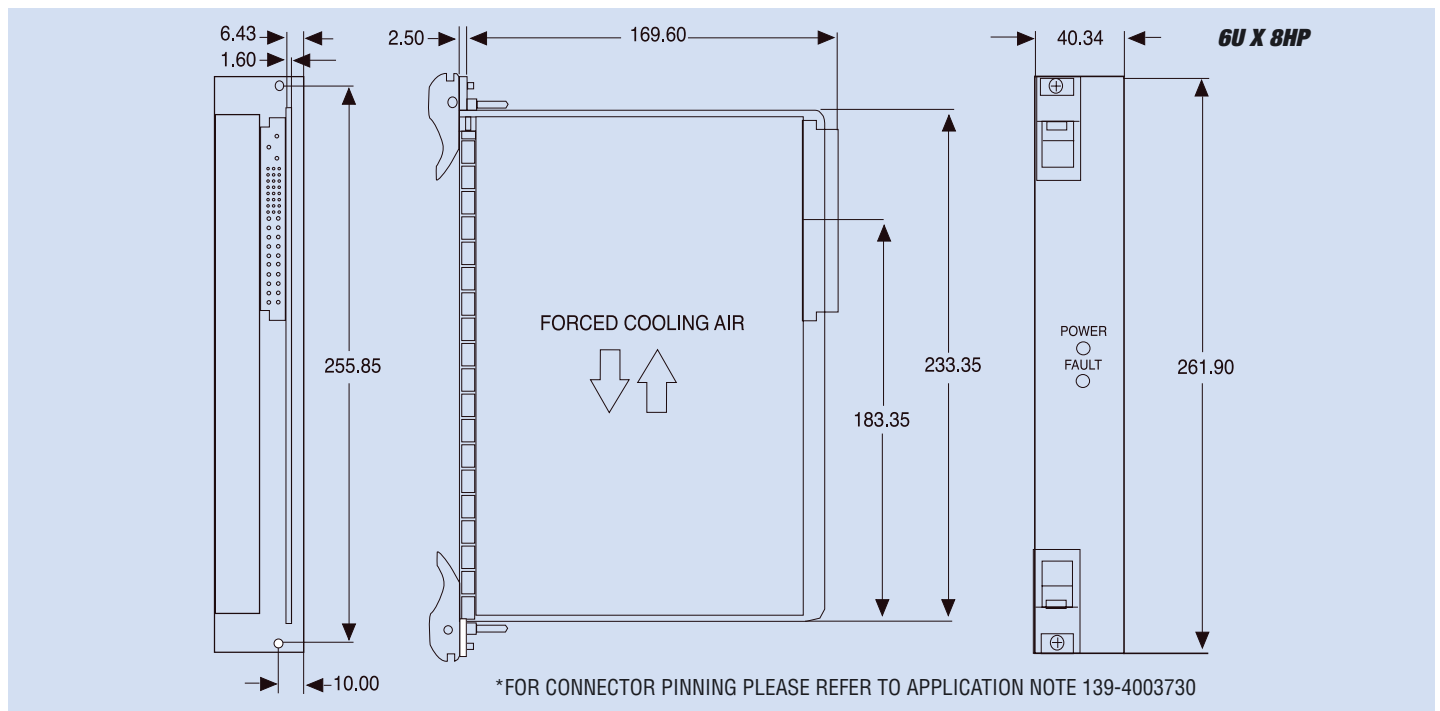


CompactPCI 6U 8HP 350 WATT 24VDC POWER SUPPLY

Description	Ordercode
350W, 6U, 24VDC CPCI PSU (Vertical Overlay)	925-4004135

INPUT	
AC Input Voltage	
DC Input Voltage	18 - 36 VDC
Input Frequency Range	
Input Inrush Current	20AMax.
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Active Power Factor Correction	
Efficiency @ 230VAC Full Load	
Efficiency @ 115VAC Full Load	
Efficiency @ 48/24VDC Full Load	79% @ 24VDC
Input Line Protection	Non-User Serviceable Fuse
Hold-up Time	
OUTPUT	
V1/Current	+5VDC /50A
V2/Current	+3.3VDC / 60A
V3/Current	+12VDC / 7.5A
V4/Current	-12VDC / 1.5A
Total Output Power	350W with 250LFM
Line Regulation	+/- 0.5%
Load Regulation	
	V1&V2 +/- 1%
	V3&V4 +/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at	Turn-On Less than 1%
Turn-On Delay	1Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot)	V1/V2 +/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
	+5VDC 60mV p-p
	+3.3VDC 60mV p-p
	+/- 12VDC 120mV p-p
Hot-Swap	Yes
Current Share Single Wire -	on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
	V1 & V2 125% Max.
	V3 200% Max.
	V4 250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery

CompactPCI 6U 8HP 350 WATT 24VDC POWER SUPPLY



ENVIRONMENTAL	Temperature	
	Operation	-5C to +55C with 250LFM Forced Air Cooling
	Storage	-40C to +85C
	Cooling	250LFM Forced Air Cooling
	Humidity	Up to 95% RH Non-Condensing
	Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter
	Surge, Spikes & Lightning Protection	EN61000-4
	Dielectric Isolation	
	Input to Case	1500Vdc
	Input to Output	1500Vdc
	Output to Case	100Vdc
	MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C
SAFETY REGULATIONS & EMI SPECIFICATIONS	Safety Approvals	UL60950, EN60950, cUL pending & CE Marking
	Dielectric Withstand Voltage	1500VDC Input to Output, 1500VDC Input to Chassis Ground
	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
	Radiated Susceptibility	EN61000-4-3 10V/m
	EFT/Burst	EN61000-4-4 1Kv
	Input Surge	
	Conducted Disturbance	EN61000-4-6 3Vrms
	Power frequency magnetic field	EN610000-4-8 1A/m
	Immunity for voltage Dips	
MONITORING COMMAND & CONTROL	Inhibit (INH #)	Open Collector Inhibited with GND.
	Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
	Connector	Standard PICMG 47 Pin Positronics
	I2C Data Bus	Optional - Static and Dynamic Parameters
	LED Indications:	Two LED Indicators
	Front Panel Green	LED Outputs OK
	Front Panel Red	LED Outputs Failure
MECHANICAL DIMENSIONS	Size	6U High 8HP wide 169.6mm
	Weight	1.8KG

CompactPCI 6U 8HP 400 WATT AC POWER SUPPLY

FEATURES

- 400W output power
- Efficiency - better than 81% @ High line
- 85-264VAC Wide-Range Input with Unity PFC
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- I2C Data Bus (optional) for PSU Hardware configuration

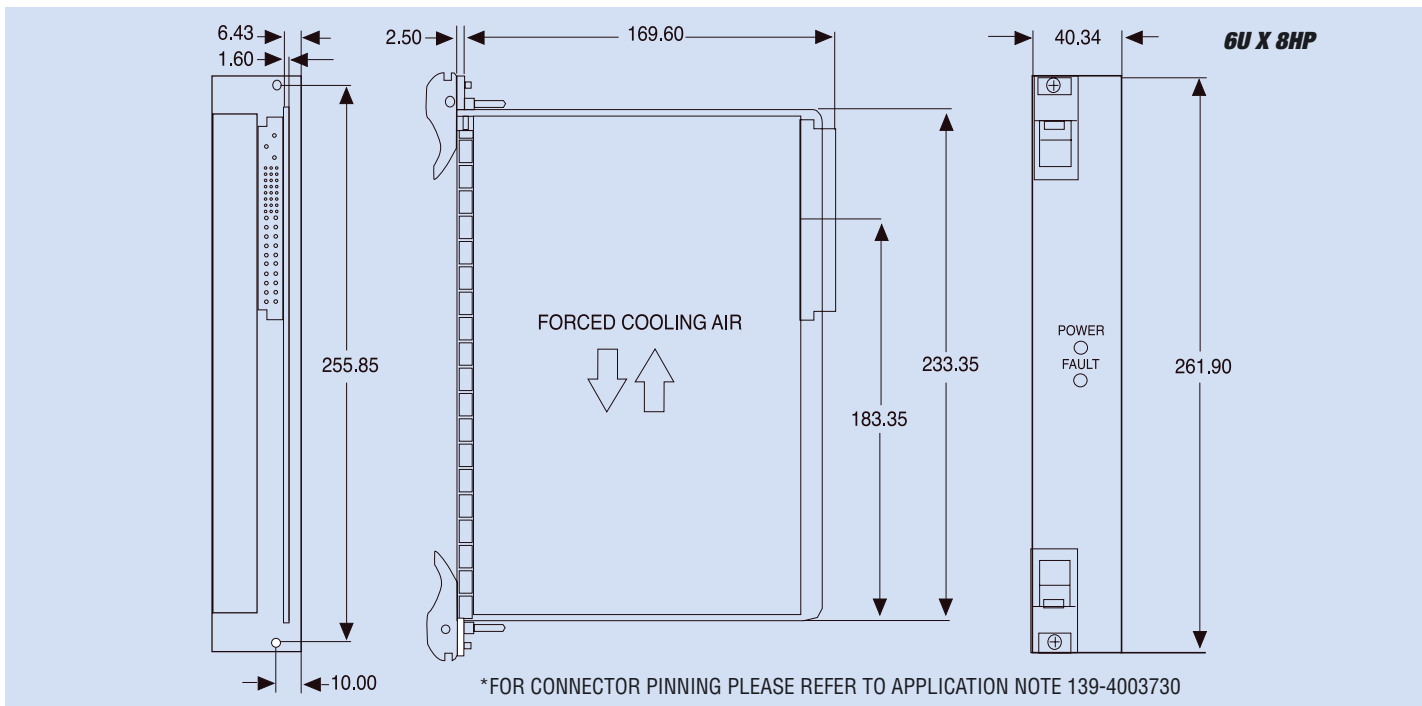


CompactPCI 6U 8HP 400 WATT AC POWER SUPPLY

Description	Ordercode
400W, 6U, AC CPCI PSU (Vertical Overlay)	925-4004133

INPUT	
AC Input Voltage	85 - 264 VRMS
DC Input Voltage	
Input Frequency Range	47 - 63 Hz (400Hz Option)
Input Inrush Current	Cold Start 30A @ 110VAC & 60A @ 230VAC
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Active Power Factor Correction	EN 61000-2-3 >0.95
Efficiency @ 230VAC	Full Load 81% Typical
Efficiency @ 115VAC	Full Load 79% Typical
Efficiency @ 48/24VDC	Full Load
Input Line Protection Non-User Serviceable Fuse	
Hold-up Time	16mSec @ Full Load
OUTPUT	
V1/Current	+5VDC / 50A
V2/Current	+3.3VDC / 80A
V3/Current	+12VDC / 7.5A
V4/Current	-12VDC / 1.5A
Total Output Power	400W with 250LFM (500W With 400LFM - Safety Pending)
Line Regulation	+/- 0.5%
Load Regulation	
V1&V2	+/- 1%
V3&V4	+/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	2Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot)	V1/V2 +/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
+5VDC	60mV p-p
+3.3VDC	60mV p-p
+/- 12VDC	120mV p-p
Hot-Swap	Yes
Current Share	Single Wire - on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50% max Load peak transient < 5%. & output
Recovers to 1% in	Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
V1 & V2	125% Max.
V3	200% Max.
V4	250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery

CompactPCI 6U 8HP 400 WATT AC POWER SUPPLY



ENVIRONMENTAL	Temperature		
	Operation	-5C to +55C with 250LFM Forced Air Cooling	
	Storage	-40C to +85C	
	Cooling	250LFM Forced Air Cooling	
	Humidity	Up to 95% RH Non-Condensing	
	Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3	
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter	
	Surge, Spikes & Lightning Protection	EN61000-4	
	Dielectric Isolation		
	Input to Case	1500Vrms	
	Input to Output	3000Vrms	
	Output to Case	100Vdc	
	MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C	
	SAFETY REGULATIONS & EMI SPECIFICATIONS	Safety Approvals	UL60950, EN60950, cUL & CE Marking
Dielectric Withstand Voltage		4200VDC Input to Output, 2121VDC Input to Chassis Ground	
ESD Susceptibility		EN61000-4-2 4Kv Contact 8Kv Air	
Radiated Susceptibility		EN61000-4-3 10V/m	
EFT/Burst EN61000-4-4 1Kv			
Input Surge		EN61000-4-5 1Kv L-L 2Kv L-Gnd	
Conducted Disturbance		EN61000-4-6 3Vrms	
Power frequency magnetic field		EN610000-4-8 1A/m	
Immunity for voltage Dips		EN61000-4-11	
MONITORING COMMAND & CONTROL		Inhibit (INH #)	Open Collector Inhibited with GND.
		Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit	
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV	
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down	
	Connector	Standard PICMG 47 Pin Positronics	
	I2C Data Bus	Optional - Static and Dynamic Parameters	
	LED Indications:	Two LED Indicators	
	Front Panel Green	LED Outputs OK	
	Front Panel Red	LED Outputs Failure	
MECHANICAL DIMENSIONS	Size	6U High 8HP wide 169.6mm Deep	
	Weight	1.8KG	

CompactPCI 6U 8HP 400 WATT 48VDC POWER SUPPLY

FEATURES

- 400W output power
- Efficiency - better than 83%
- 36-72VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- I2C Data Bus (optional) for PSU Hardware configuration

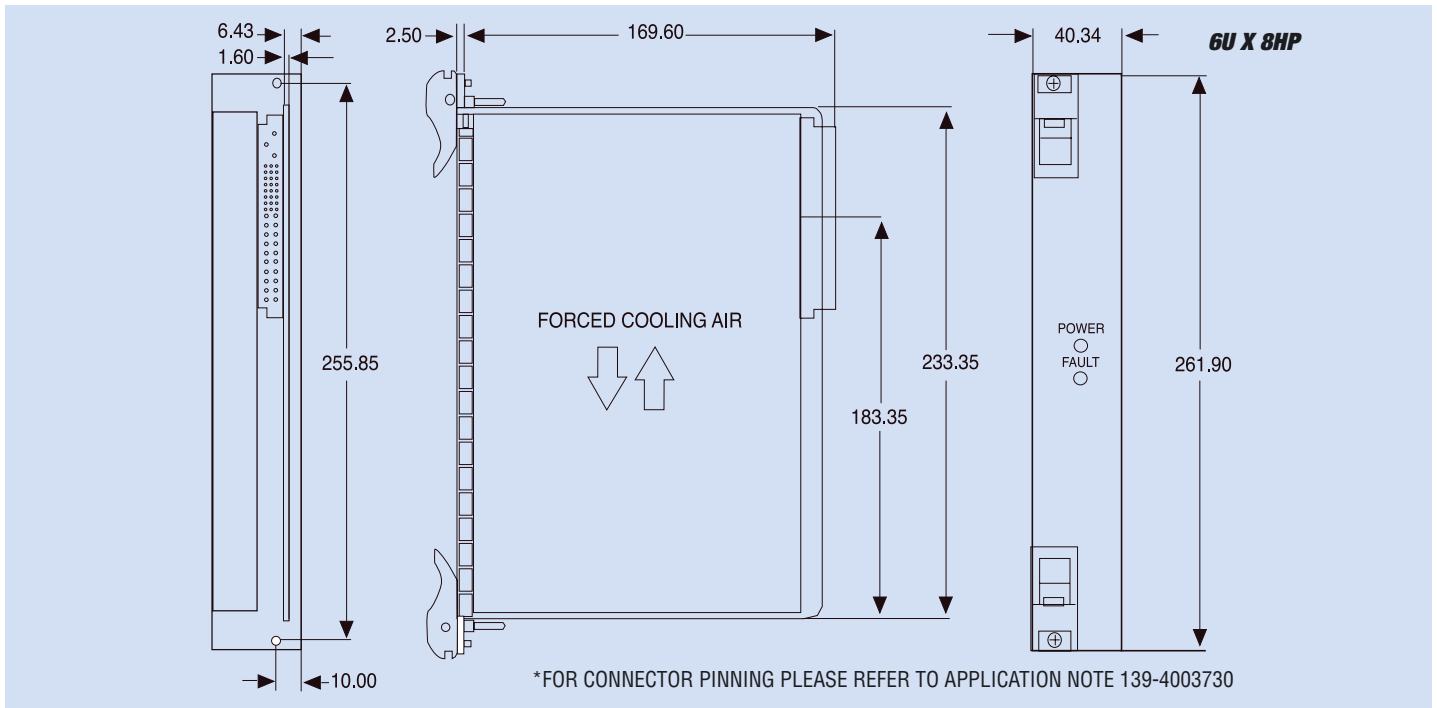


CompactPCI 6U 8HP 400 WATT 48VDC POWER SUPPLY

Description	Ordercode
400W, 6U, 48VDC CPCI PSU (Vertical Overlay)	925-4004134

INPUT	AC Input Voltage	
	DC Input Voltage	36 - 72 VDC
	Input Frequency Range	
	Input Inrush Current	20A Max.
	Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
	Active Power Factor Correction	
	Efficiency @ 230VAC Full Load	
	Efficiency @ 115VAC Full Load	
	Efficiency @ 48/24VDC Full Load	83% @ 48VDC
	Input Line Protection	Non-User Serviceable Fuse
	Hold-up Time	
OUTPUT	V1/Current +5VDC /50A	
	V2/Current	+3.3VDC / 80A
	V3/Current	+12VDC / 7.5A
	V4/Current	-12VDC / 1.5A
	Total Output Power	400W with 250LFM (500W With 400LFM - Safety Pending)
	Line Regulation	+/- 0.5%
	Load Regulation	
	V1&V2	+/- 1%
	V3&V4	+/- 5%
	Min. Load Requirement No	
	Overshoot/Undershoot at Turn-On	Less than 1%
	Turn-On Delay	1Sec Max.
	Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
	Voltage Set point (Internal trim-pot)	V1/V2 +/- 5%
	Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
	+5VDC	60mV p-p
	+3.3VDC	60mV p-p
	+/- 12VDC	120mV p-p
	Hot-Swap Yes	
	Current Share	Single Wire - on V1 & V2
	Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
	Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
	Transient Response	For a step Load of 50% max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
	Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
	Overload Protection	
	V1 & V2	125% Max.
	V3	200% Max.
	V4	250% Max.
	Short Circuit Protection Available On All Outputs	
	Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery

CompactPCI 6U 8HP 400 WATT 48VDC POWER SUPPLY



ENVIRONMENTAL		Temperature
	Operation	-5C to +55C with 250LFM Forced Air Cooling
	Storage	-40C to +85C
	Cooling	250LFM Forced Air Cooling
	Humidity	Up to 95% RH Non-Condensing
	Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter
	Surge, Spikes & Lightning Protection	EN61000-4
	Dielectric Isolation	
	Input to Case	1500Vdc
	Input to Output	1500Vdc
	Output to Case	100Vdc
	MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C
SAFETY REGULATIONS & EMI SPECIFICATIONS		
	Safety Approvals	UL60950, EN60950, cUL & CE Marking
	Dielectric Withstand Voltage	1500VDC Input to Output, 1500VDC Input to Chassis Ground
	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
	Radiated Susceptibility	EN61000-4-3 10V/m
	EFT/Burst	EN61000-4-4 1Kv
	Input Surge	
	Conducted Disturbance	EN61000-4-6 3Vrms
	Power frequency magnetic field	EN610000-4-8 1A/m
	Immunity for voltage Dips	
MONITORING COMMAND & CONTROL		
	Inhibit (INH #)	Open Collector Inhibited with GND.
	Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
	Connector	Standard PICMG 47 Pin Positronics
	I2C Data Bus	Optional - Static and Dynamic Parameters
	LED Indications:	Two LED Indicators
	Front Panel Green	LED Outputs OK
	Front Panel Red	LED Outputs Failure
MECHANICAL DIMENSIONS		
	Size	6U High 8HP wide 169.6mm Deep
	Weight	1.8KG

CompactPCI 6U 8HP 500 WATT AC POWER SUPPLY

FEATURES

- 500W output power
- Efficiency - better than 81% @ High line
- 85-264VAC Wide-Range Input with Unity PFC
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- I2C Data Bus (optional) for PSU Hardware configuration

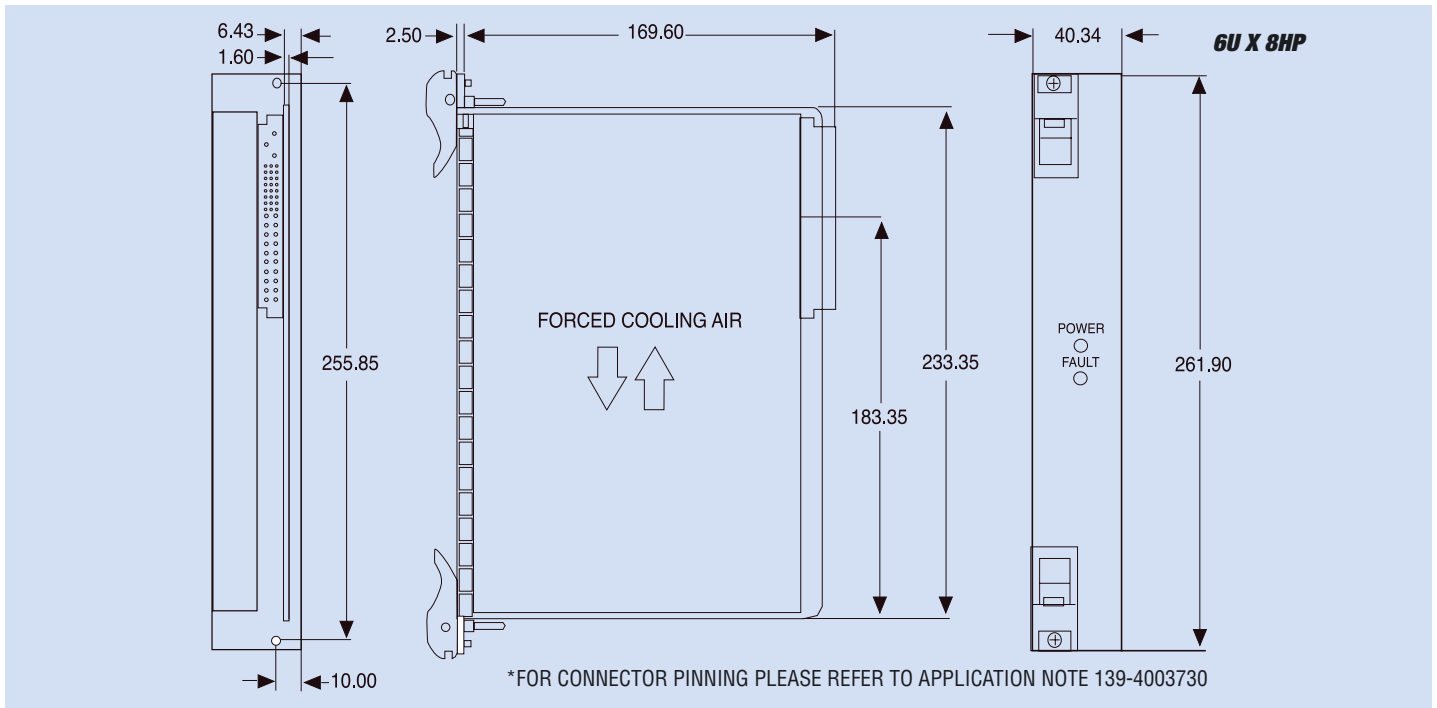


CompactPCI 6U 8HP 500 WATT AC POWER SUPPLY

Description	Ordercode
500W, 6U, AC CPCI PSU (Vertical Overlay)	925-4004136

INPUT	AC Input Voltage	85 - 264 VRMS	
	DC Input Voltage		
	Input Frequency Range	47 - 63 Hz (400Hz Option)	
	Input Inrush Current	Cold Start 35A @ 110VAC & 65A @ 230VAC	
	Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter	
	Active Power Factor Correction	EN 61000-2-3 >0.95	
	Efficiency @ 230VAC Full Load	81% Typical	
	Efficiency @ 115VAC Full Load	79% Typical	
	Efficiency @ 48/24VDC Full Load		
	Input Line Protection	Non-User Serviceable Fuse	
	Hold-up Time	20mSec @ Full Load	
	OUTPUT	V1/Current	+5VDC / 65A
V2/Current		+3.3VDC / 80A	
V3/Current		+12VDC / 12A	
V4/Current		-12VDC / 1.5A	
Total Output Power		500W With 400LFM	
Line Regulation		+/- 0.5%	
Load Regulation			
		V1&V2	+/- 1%
		V3&V4	+/- 5%
Min. Load Requirement		No	
Overshoot/Undershoot at		Turn-On Less than 1%	
Turn-On Delay		2Sec Max.	
Initial Setting Accuracy		+/- 0.4% for V1 & V2 +/- 2% for V3 & V4	
Voltage Set point (Internal trim-pot)		V1/V2 +/- 5%	
Ripple @ Noise with 20MHz Bandwidth measured across		10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
		+5VDC	60mV p-p
		+3.3VDC	60mV p-p
		+/- 12VDC	120mV p-p
Hot-Swap		Yes	
Current Share		Single Wire - on V1 & V2	
Remote Sense (Open sense lines protected)		On +5VDC & +3.3VDC	
Long Term Stability		0.1% over 10 Hours after 10min. Warm Up	
Transient Response		For a step Load of 50% max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.	
Over-Voltage Protection		110% - 125% of V1,V2 & V3 with Latched Shut Down	
Overload Protection			
		V1 & V2	125% Max.
		V3	200% Max.
	V4	250% Max.	
Short Circuit Protection	Available On All Outputs		
Temperature Protection Excess	Temp will Shut Down the Unit - with Auto recovery		

CompactPCI 6U 8HP 500 WATT AC POWER SUPPLY



ENVIRONMENTAL

Temperature	
Operation	-5C to +55C with 250LFM Forced Air Cooling
Storage	-40C to +85C
Cooling	250LFM Forced Air Cooling
Humidity	Up to 95% RH Non-Condensing
Shock & Vibration Storage:	EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2
Transportation class 2.3,	EN 300 019-2-3 Use class 3.3
Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter
Surge, Spikes & Lightning Protection	EN61000-4
Dielectric Isolation	
Input to Case	1500Vrms
Input to Output	3000Vrms
Output to Case	100Vdc
MTBF >	400,000 Hours per Bellcore Standard B332 Gb 50C

SAFETY REGULATIONS & EMI SPECIFICATIONS

Safety Approvals	UL60950, EN60950, cUL & CE Marking
Dielectric Withstand Voltage	4200VDC Input to Output, 2121VDC Input to Chassis Ground
ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
Radiated Susceptibility	EN61000-4-3 10V/m
EFT/Burst	EN61000-4-4 1Kv
Input Surge	EN61000-4-5 1Kv L-L 2Kv L-Gnd
Conducted Disturbance	EN61000-4-6 3Vrms
Power frequency magnetic field	EN610000-4-8 1A/m
Immunity for voltage Dips	EN61000-4-11

MONITORING COMMAND & CONTROL

Inhibit (INH #)	Open Collector Inhibited with GND.
Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
Connector	Standard PICMG 47 Pin Positronics
I2C Data Bus	Optional - Static and Dynamic Parameters
LED Indications:	Two LED Indicators
Front Panel Green	LED Outputs OK
Front Panel Red	LED Outputs Failure

MECHANICAL DIMENSIONS

Size 6U	High 8HP wide 169.6mm Deep
Weight	1.8KG

CompactPCI 6U 8HP 500 WATT 48VDC POWER SUPPLY

FEATURES

- 500W output power
- Efficiency - better than 83%
- 36-72VDC Nominal Input Voltage
- Operation Temp. -5°C to +55 °C – No De-rating
- “Hot-Swap” Active Current share on V1 & V2
- N+1 Full redundancy operation
- No Minimum loading requirement
- Standard PICMG® 47Pin Connector
- IEEE 1101.10 compliant form factor
- Safety Per UL CSA & CE Marking
- Meets FCC-68 Part 15 Class-B & EN-55022 Class-B with external line filter
- I2C Data Bus (optional) for PSU Hardware configuration

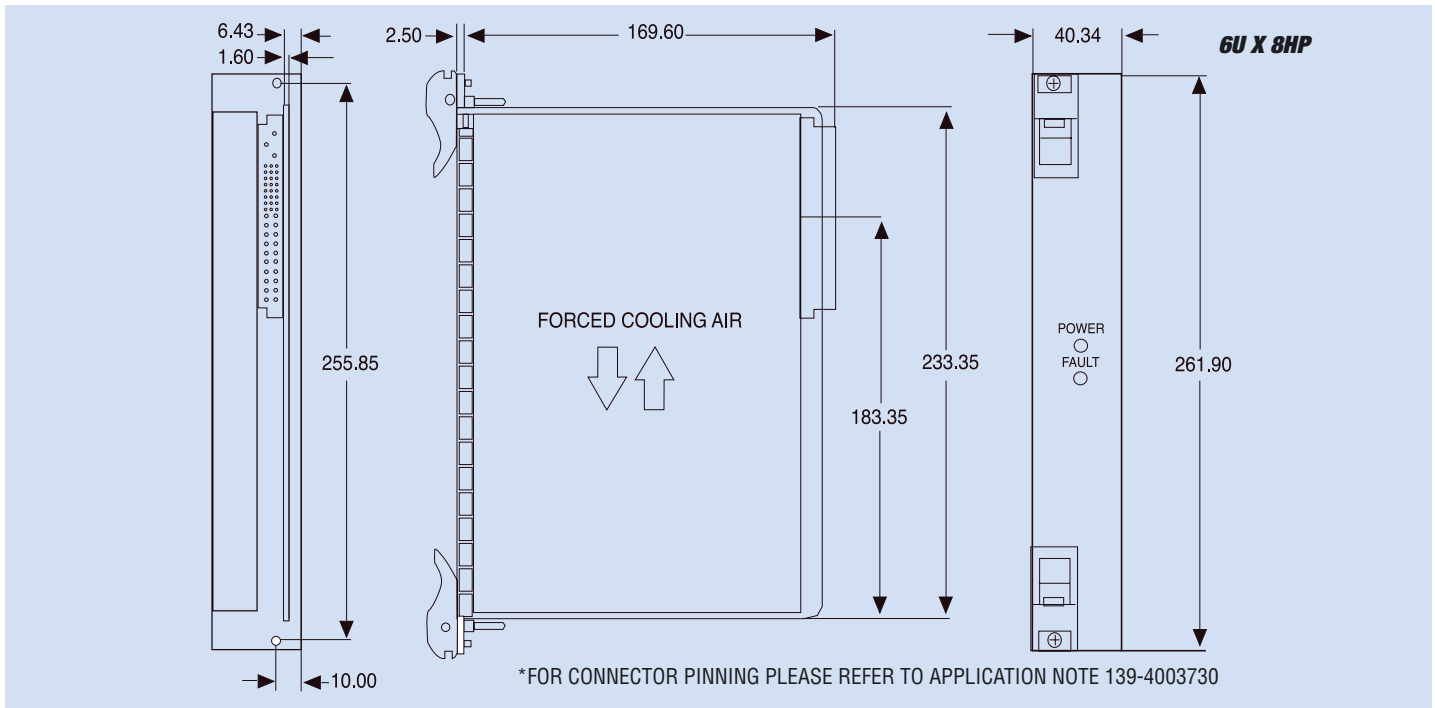


CompactPCI 6U 8HP 500 WATT 48VDC POWER SUPPLY

Description	Ordercode
500W, 6U, 48V DC CPCI PSU (Vertical Overlay)	925-4004137

INPUT	
AC Input Voltage	
DC Input Voltage	36 - 72 VDC
Input Frequency Range	
Input Inrush Current	65A max @ 48VDC
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Active Power Factor Correction	
Efficiency @ 230VAC Full Load	
Efficiency @ 115VAC Full Load	
Efficiency @ 48/24VDC Full Load	83% @ 48VDC
Input Line Protection	Non-User Serviceable Fuse
Hold-up Time	
OUTPUT	
V1/Current	+5VDC /65A
V2/Current	+3.3VDC / 80A
V3/Current	+12VDC / 12A
V4/Current	-12VDC / 1.5A
Total Output Power	500W With 400LFM
Line Regulation	+/- 0.5%
Load Regulation	
	V1&V2 +/- 1%
	V3&V4 +/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	1Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot)	V1/V2 +/- 5%
Ripple @ Noise with 20MHz Bandwidth measured across 10uF Load Capacitor Paralleled with 0.1uF Ceramic Cap.	
	+5VDC 60mV p-p
	+3.3VDC 60mV p-p
	+/- 12VDC 120mV p-p
Hot-Swap	Yes
Current Share	Single Wire - on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up
Transient Response	For a step Load of 50%max Load peak transient < 5% . & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1,V2 & V3 with Latched Shut Down
Overload Protection	
	V1 & V2 125% Max.
	V3 200% Max.
	V4 250% Max.
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery

CompactPCI 6U 8HP 500 WATT 48VDC POWER SUPPLY



ENVIRONMENTAL	Temperature	
	Operation	-5C to +55C with 250LFM Forced Air Cooling
	Storage	-40C to +85C
	Cooling	250LFM Forced Air Cooling
	Humidity	Up to 95% RH Non-Condensing
	Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2, EN 300 019-2-2 Transportation class 2.3, EN 300 019-2-3 Use class 3.3
	Conducted & Radiated Emission	EN55022 Class B and EN-61000. Measured with a mains input filter
	Surge, Spikes & Lightning Protection	EN61000-4
	Dielectric Isolation	
	Input to Case	1500Vdc
Input to Output	1500Vdc	
Output to Case	100Vdc	
MTBF	> 400,000 Hours per Bellcore Standard B332 Gb 50C	
SAFETY REGULATIONS & EMI SPECIFICATIONS	Approvals	UL60950, EN60950, cUL & CE Marking
	Dielectric Withstand Voltage	1500VDC Input to Output, 1500VDC Input to Chassis Ground
	ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
	Radiated Susceptibility	EN61000-4-3 10V/m
	EFT/Burst	EN61000-4-4 1Kv
	Input Surge	
	Conducted Disturbance	EN61000-4-6 3Vrms
	Power frequency magnetic field	EN610000-4-8 1A/m
	Immunity for voltage Dips	
MONITORING COMMAND & CONTROL	Inhibit (INH #)	Open Collector Inhibited with GND.
	Power FAIL (FLT#)	Open Collector LOW Signal Indicates Outputs Out of Range
	Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
	Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
	Degradation (DEG #)	Open Collector Activated LOW before Thermal Shut-Down
	Connector	Standard PICMG 47 Pin Positronics
	I2C Data Bus	Optional - Static and Dynamic Parameters
	LED Indications:	Two LED Indicators
	Front Panel Green	LED Outputs OK
	Front Panel Red	LED Outputs Failure
MECHANICAL DIMENSIONS	Size	6U High 8HP wide 169.6mm Deep
	Weight	1.8KG