

**Model: BPD-C300-120**

Total Power	300 Watts
Input Range	16.8-137.5 VDC
Outputs	12V plus 5VSB

**SPECIAL FEATURES**

- Nominal Input Voltages 24 – 110VDC
- Active Current Share – Single wire
- Remote Sensing
- N+1 Redundancy
- Power Fail
- PS\_ON
- Enable
- Temperature Monitoring
- I2C interface with PMBus communication
- Hot Pluggable
- CE compliant
- RoHS compliant

**ENVIRONMENTAL SPECIFICATIONS**

Humidity: Up to 95% non-condensing

Storage Temperature: -40° to +85°C

Ambient Operating Temperature: -40 to +70°C continuous duty, full rating.

Cooling: 20CFM forced air cooling required

**SAFETY APPROVALS**

CE declaration, **no** UL/IEC/EN60950-1 certificate



**ELECTRICAL SPECIFICATIONS**

**Input Specifications**

Input Range..... 16.8-137.5 VDC  
 EMI filter..... EN55022 Class B, FCC Part 15  
 Inrush Current..... ≤30A  
 Input Current..... 25A @ 14.4VDC  
 Isolation..... 2828 VDC (Input to Output)  
 Efficiency..... >89%

**Output Specifications**

DC Output..... Maximum continuous output power 300 Watts with 20CFM fan cooling required

Line Regulation..... ±0.5%

Load Regulation..... ±1% on main output

Ripple and Noise..... 2% Pk to Pk

Transient Response..... 2% Maximum deviation; returns to initial condition in 1 msec max.

300-1 Route 17 South Suite B2  
 Lodi, NJ 07644  
 Phone: (973) 594-1800 Fax: (973) 594-1804  
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## Model: BPD-C300-120

### ELECTRICAL SPECIFICATIONS (CONT')

#### Output Specifications

Long Term Stability..... 0.01% after 20 minute warm-up.

OVP.....Set at 115% to 135%.  
Latching method. DC must be recycled to restart the unit.

Short-circuit Protection.....The units will withstand a continuous short without damage. It will automatically return to regulation upon removal of the short.

Overload Protection.....The overload protection feature will reduce the output voltage to a safe dissipation level when the output power rating exceeds 110% of maximum rated power. The unit will automatically return to regulation upon removal of the overload.

ORing FET.....ORing FET provided for redundant operation.

Active Current Share .....12V Output will current share within 5% when interconnected by a single wire

Passive Current Share .....5VSBY droop type

Remote Sensing .....on 12V Output only

PS\_ON .....Digital Input: A logic low enables the Main output of the supply.

Enable .....Digital Input. When driven high, main output is disabled. When Low, power supply main output state is as controlled by PS\_ON.

FAL/PWR\_FAIL .....Digital output, Open Collector, driven high when outputs are in regulation.

DEG .....Open Collector, temperature warning signal A TBD temperature will change signal state from Hi to Low or Low to Hi (programmable preferences)

PS Present ..... Digital Output. Pulled low via 100 Ohm resistor

Thermal Protection.....The power supply has a built in thermal sensor to protect against abnormal temperature conditions.

I<sup>2</sup>C/PMBUS.....Monitors temperature, output voltage, and output current, connects to a serial NVRAM which is programmed with serial number. PMBUS Standard to allow monitoring of overall operation of power supply.

LED Indicators ..... The power supply will have two LED's providing the power supply status:

All outputs are operating within spec	Steady Green
Standby (PSON disabled)	Blinking Green
Voltage or Temperature warning	Blinking Yellow
Voltage or Temperature fault	Steady Yellow
PSKILL and/or power supply off	NO LED's

### OVERALL MECHANICAL DIMENSIONS

See attached Outline Drawing

### PIN ASSIGNMENTS

See Hook-Up Drawing attached

### CONNECTOR

Input/Output.....FCI Connector 51939-667

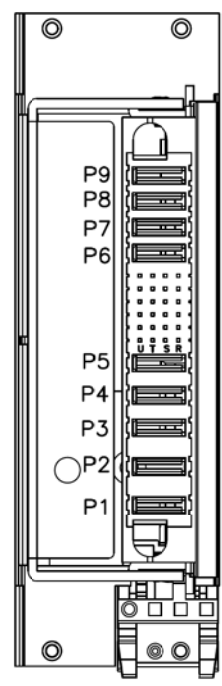
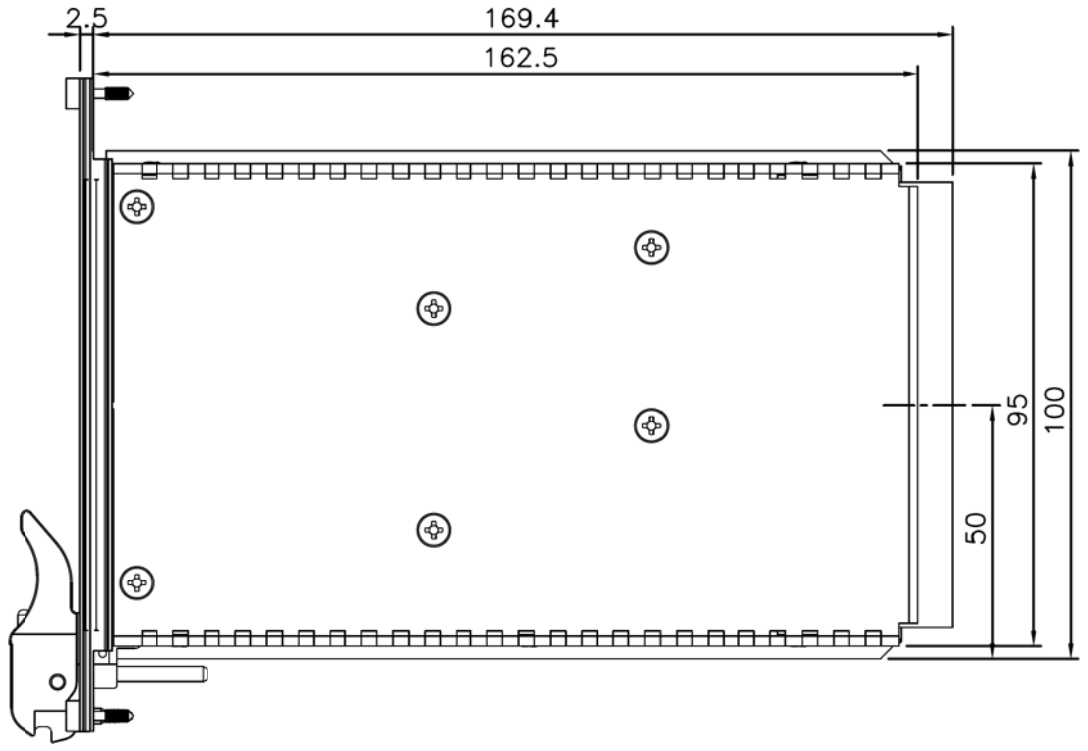
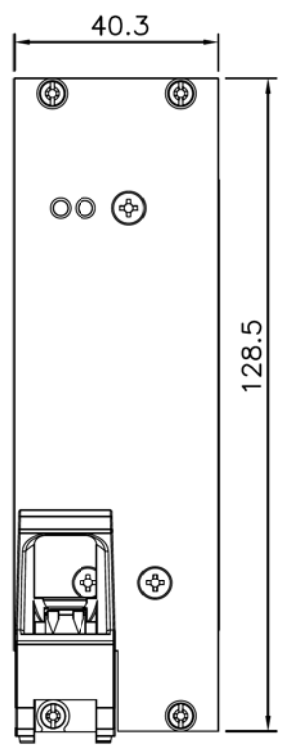
### NOTES

- Specifications subject to change without notice.
- All dimensions in inches/mm
- Warranty: 2 year
- Weight: Approx. 1.6lbs (0.68Kg)

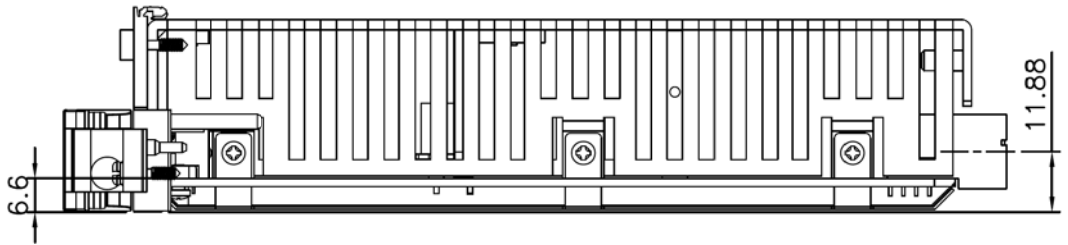
### VOLTAGE/CURRENT RATING CHART

Part Number	Assignment	Voltage	Minimum	Maximum
BPD-C300-120	VO1	+12V	0A	25A
	5VSB	+5V	0A	2.5A

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CONNECTOR:  
FCI51939-667



<i>BluTek Power</i>			
TITLE		OUTLINE DRAWING	
DRAWN	L. J. HUN	DRG. NO.	BLU-739
CHECKED		MODEL NO.	BPD-C300-120

UNIT	mm[inches]	REV. NO.	A	SCALE	0.7 : 1	MAT'L	t=
THIRD				TOL.	± 0.2	DATE	05. 07. 2014



300-1 (B2) Route 17, Lodi, NJ 07644

MODEL NO. : BPD-C300-120 LF

## IN/OUTPUT RATING & PIN ASSIGNMENT

SIZE : A4	FM-4000-34/REV.A-080502'
UNIT :mm[inches]	FILENAME: PPSC0605
REV. NO.: A	DATE : 06. 13. 2013
DRAWN: 洪麗珍	CHECKED:
L. J. Hun	

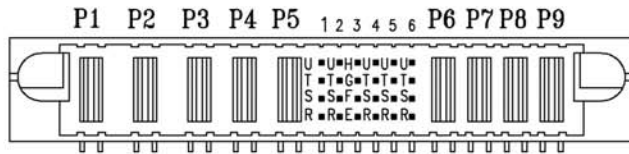
### INPUTS :

ASSIGNMENT	CURRENT	PIN NBR
+: 14.4-150V		P5
-:		P4
GND:	50-60Hz	P3

### OUTPUTS :

ASSIGNMENT	D.C. VOLTAGE	CURRENT	PIN NBR
V01:	12V ---	25A	P8,P9
DC COM:	<b>G3 (SHORT PIN)</b>		P6,P7,S6,G3,U4
5VSB:	5V ---	2A	T5,T6,U6
-VS:			R2
12VCS:			S2
FAL/PWR_FAIL:			U2
+VS:	(SHORT PIN)		E3
PS_ON:	(SHORT PIN)		F3
PS_PRESENT:	(SHORT PIN)		H3
A2:			R4
A1:			S4
A0:			T4
SDA:			R5
SCL:			S5
DEG:			U5
ENABLE:			R6
NU:			P1,P2,R1,S1,T1,U1,T2

P/N: FCI51939-667



P1	P2	P3	P4	P5	U1	U2	H3	U4	U5	U6	P6	P7	P8	P9
NU	NU	GND	-	+	NU	FAL/PWR_FAIL	PSPRESENT	COM	DEG	5VSTBY				
					T1	T2	G3	T4	T5	T6				
					NU	NU	COM	A0	5VSTBY	5VSTBY	COM	COM	+12V OUT	+12V OUT
					S1	S2	F3	S4	S5	S6				
					NU	12VCS	PSON	A1	SCL	COM				
					R1	R2	E3	R4	R5	R6				
					NU	-VS	+VS	A2	SDA	ENABLE				

THE SHORTER PINS ARE H3,G3,F3,E3

**MAXIMUM OUTPUT POWER: 300W**