

# 657 Watts

## DS657-9-3

**Total Power:** 657 Watts  
**Input Voltage:** 85-264 VAC  
**# of Outputs:** Two & Standby



### Special Features

- EN61000-3-2 Harmonic Compliance
- Active Power Factor Correction
- Active Current Share
- 1U high
- FCC 47 CFR Part 15 Class A (US)
- CISPR22 Class A
- EN55022:1998 (Europe)
- EN61000 Immunity Standards
- 12V standby
- Fan Speed Control
- Over Current Protection (OCP)
- Over Voltage Protection (OVP)
- Over Temperature Protection (OTP)
- IEC320 AC Inlet
- On/off switch
- I<sup>2</sup>C Communications
- No minimum load required
- 2250VDC Isolation
- IEEE 802.3af Compliant Power Source
- 1 year warranty

### Environmental

Operating Temperature: 0°C to 50°C  
 (50% power derating at 70°C)

MTBF (MIL HDBK 217F): >100KHrs at full load, 40°C

Humidity:

Operating: 85% RH, non-condensing

Non-operating: 95% RH, non-condensing

Electromagnetic Susceptibility: Designed to meet  
 EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-11 Level 3

### Electrical Specs

#### Input

Input Range	85-264VAC
Frequency	47 - 63 Hz
Inrush Current	17A max, 115VAC, 25°C
Efficiency	80% typical at full load, 115VAC
EMI Filter	Class A
Power Factor	0.99 typical
Leakage Current	2mA maximum @ 240 VAC

#### Output

Maximum Power	657W
Hold Up Time	20ms (minimum)
Over Current	110% - 130% of nominal Autorecovery
Protection (OCP)	
Short Circuit	Latch off main outputs if one
Protection	of the main output short circuits to common
Over Voltage Protection (OVP)	107% - 117% of nominal Latch, AC recycle to reset

#### Logic Control

AC OK	TTL signal HI H
DC OK	TTL signal LOW
ENABLE	Logic LOW ( 1V) capable of 2mA sink current

### Safety

UL/cUL 60950 3rd Edition  
 TUV EN60950 3rd Edition  
 IEC60950 3rd Edition  
 CE Mark EN60950 3rd Edition



DC Output Voltages

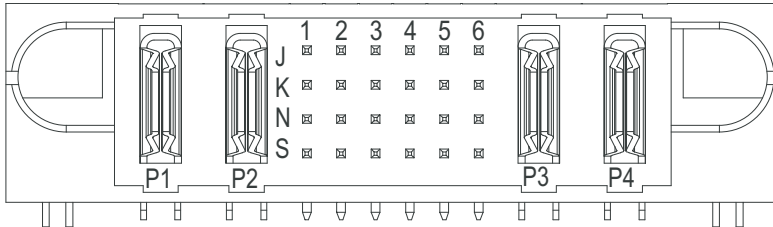
Output	Voltage(V)	Regulation	Minimum Load (A)	Maximum Load (A)	Ripple(peak-peak)
V1	+48V/+51V	±5%	0.0	10.0	500mV
V2	12V	±5%	0.0	12.0	120mV
V3	12V	±5%	0.0	0.5	120mV

Notes:

1. Ripple and noise tested with 10µF capacitor in parallel with a 0.1µF capacitor, 20MHz bandwidth.

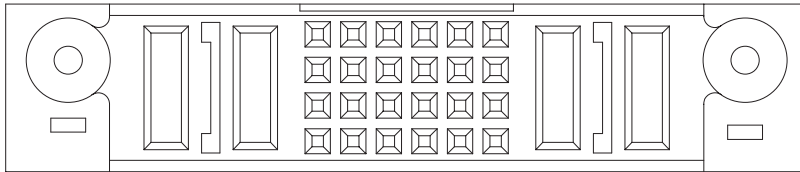
DS657-9-3 Mechanical Drawings:

PSU Connector: FCI 51720-10202402AA



Pin Location	Signal Reference
P1	12V Output
P2	12V Output RTN
1J	12V + Sense
1K	12V - Sense
1N	12V Current-Share
1S	Power Supply Present
2J	Serial Data Line
2K	Serial Clock Line
2N	Address Input 0
2S	Address Input 1
3J	12V Aux Output RTN
3K	12V INHIBIT
3N	51V INHIBIT
3S	Address Input 2
4J	12V Aux Output
4K	DC OK
4N	AC OK
4S	FANFAIL / OTP
5J	NOT CONNECTED
5K	NOT CONNECTED
5N	NOT CONNECTED
5S	NOT CONNECTED
6J	51V + Sense
6K	51V - Sense
6N	51V Current-Share
6S	NOT CONNECTED
P3	51V Output RTN
P4	51V Output

Mating Connector FCI 51740-10202402AA





## Logic Signal

### 1. 12V Remote Sense

Pin 1J - 12V Sense  
Pin 1K

Compensates for up to 0.5V drop. Recommended shielded twisted wire pair.

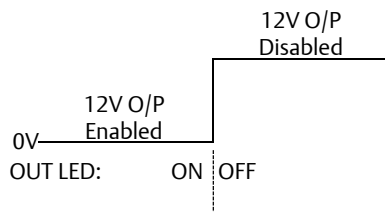
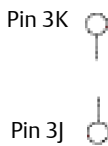
### 2. 12V Current-Share (In/Out Signal)



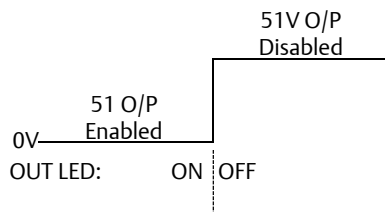
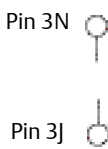
C-Share Pin is used when connecting units in parallel to achieve current sharing. Current share accuracy is typically 10% of full load.

Note: Current-Share voltage is 1.5V at 100% load current (12A)

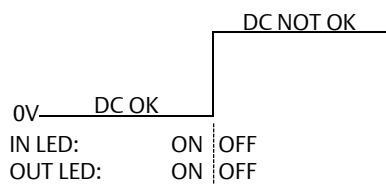
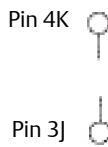
### 3. 12V Inhibit (In Signal)



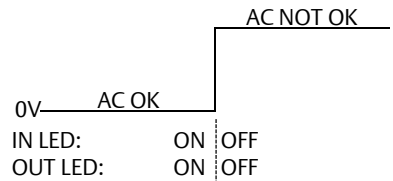
### 4. 51V Inhibit (In Signal)



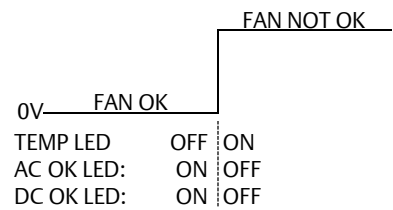
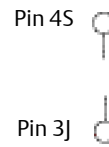
### 5. DC OK (Out Signal)



### 6. AC OK (Out Signal)



### 7. FANFAIL/OTP (OUT Signal)



### 8. 51V Remote Sense

Pin 6J 51V Sense  
Pin 6K 51V -Sense

Compensates for up to 0.5V drop. Recommended shielded twisted wire pair.

### 9. 51V Current-Share (In/Out Signal)



C-Share Pin is used when connecting units in parallel to achieve current sharing. Current share accuracy is typically 10% of full load.

Note: Current-Share voltage is 2.5V at 100% load current (10A)

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**EUROPE**

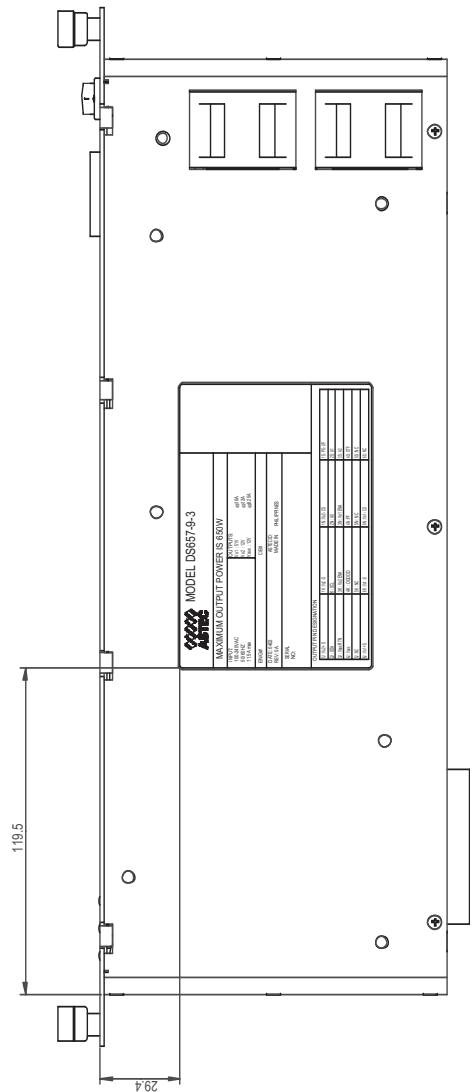
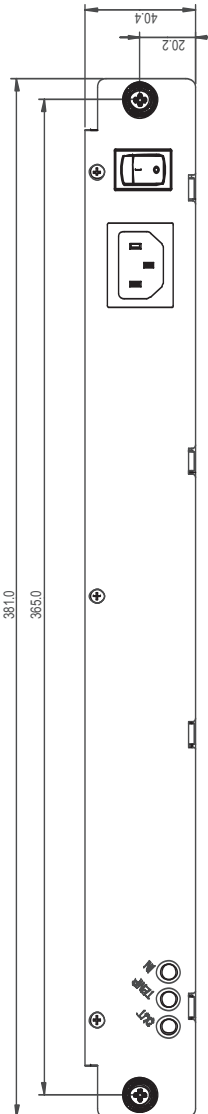
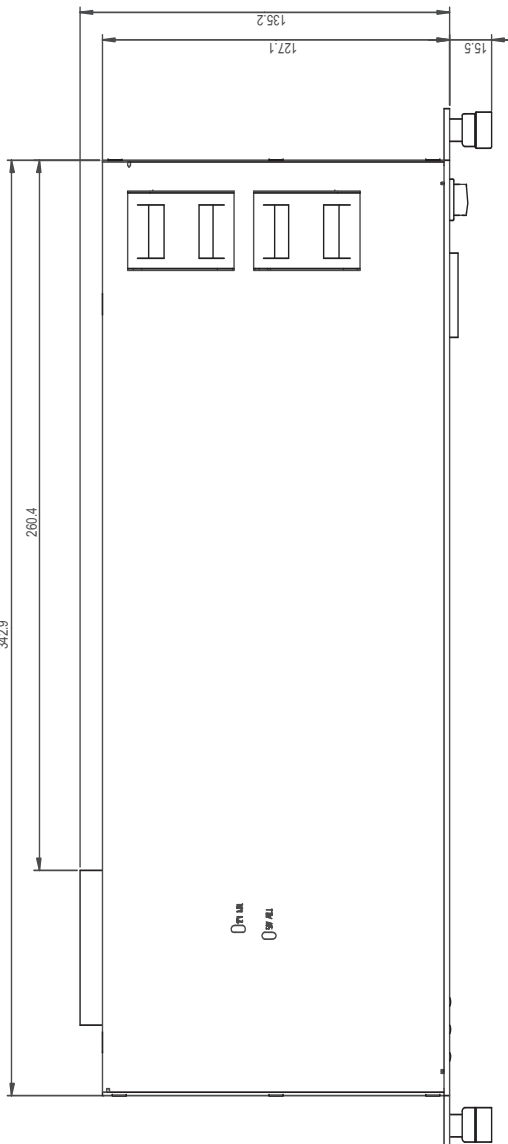
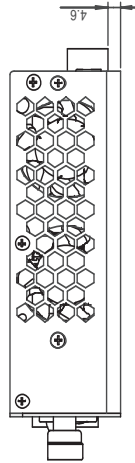
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DS657-9-3 PSU Outline



MODEL DS657-9-3	
MAXIMUM OUTPUT POWER IS 80W	
INPUT VOLTAGE	100-240V AC
INPUT CURRENT	1.5A
INPUT POWER	180W
EFFICIENCY	44%
OUTPUT VOLTAGE	5V
OUTPUT CURRENT	16A
OUTPUT POWER	80W
REGULATION	±0.5%
LOAD REGULATION	±0.5%
LINE REGULATION	±0.5%
TEMPERATURE	0°C to 40°C
ENVIRONMENTAL	0% to 95% RH
MTBF	100,000 HOURS
WARRANTY	3 YEARS