

Electrical Specification for:	eFS175-205
Telkoor Part number:	900-0215-0000
Product Description:	Dual Output 150W open frame power supply

CUSTOMER	SIZE	CAGE	CODE	S5417	DWG. NO.	0215-DOC1-10		REV	A2
SCIENTIFIC ATLANTA	SCALE			RELEASE DATE	10/11/2005	SHEET	1	OF	5



	REVISION HISTORY										
Rev Level	Rev Date	Change Made	Reason for Change	Effective							
A1	16/1/06	Corrections of errors in output connector designations	Reflect the correct connector designations	16/1/06							
A2	11/06/06	Power factor , overshoot, rise time	Meet the performance	11/06/06							

Approvals							
	Name	Date					
Written by:	Sam Sadot	10/11/05					
Engineering:	Sam Sadot	10/11/05					
Sales & Marketing:	Mor Allon	10/11/05					
Management:	Yossi Ben Ami	10/11/05					

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Input:

Input Voltage: 85-264VAC Frequency: 47-63Hz

Inrush Current: 60Amaximum, cold start at 25°C, 250Vac

Power Factor:

0.96 typical at 230Vac, full load
0.98 typical at 115Vac, full load
Efficiency
80% typical at 230Vac, full load
75% typical at 115Vac, full load

Input Protection: Internal Line Fuse: IEC type 5A 250Vac Normal BLO

Brown – Out: 75 to 300Vac

Output Voltages & Currents:

Output	Output Voltage	I Min	I Max	I Peak
V1	5.0V	0	15A	16.5A
V2	+12.0V	0	5A	5.5A
Standby	5V	0	5mA	-

Output Power: 150W

Line Regulation: \pm 0.2% for Vin (Min) to Vin (Max).

Load Regulation:

V1 \pm 2% for load change from zero to full load V2 \pm 4% for load change from 10% to 100% load

Ripple & Noise

V1 75mV P-P V2 120mV
Output Voltage Adjustment Range V1 only \pm 5% Initial Set Point Tolerance: V2 \pm 1%

Overshoot & Undershoot: Less than 5% at turn ON-OFF

Transient Load Response: ±5% Max. Deviation for load change of 25% to 75%, at slew rate of 1A/usec,

recovery time less then 500Msec

Turn On Delay: 2 sec. Maximum.

Hold-up Time: 16msec minimum at any input voltage in range and full load

Turn-On Rise Time: V1- 50Msec Max . V2-250Msec Max.

Over-current Protection: V1 105 to 130% of Im, constant current limit, automatic recovery (V2 SD)

V2 110 to 150% of Im constant current limit, automatic recovery

Over-voltage Protection: Outputs shut down at 125% Max. of nominal, AC input must Recycled to

reset.

Temperature Protection: Shutdown due to excessive internal temperature 90 to 97°C (base plate),

automatic recovery.

Remote Sense Available on V1

Current Share Yes on V1- N+1 single wire. V2- Natural current sharing

Hot Swap Internal O-Ring diode on V1 Only

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Signals & Commands

Inhibit: Active low, all output shut down.

Power OK: Open collector, active low when any of V1, V2 outputs drop 10% below rated

output.

Environmental Specifications:

Temperature: Operating: -5°C to +50°C (de-rating linearly to 70 °C with 50% de-rating).

Storage: -25° C to $+85^{\circ}$ C. 0 to 70° C $\pm 0.005^{\circ}$ /°C

Temperature Coefficient: $0 \text{ to } 70^{\circ}\text{C} \pm 0.005\%/^{\circ}\text{C}$ Cooling: 100W free convection cooling (base plate cooling). 200W continuous forced air

cooling (250lfm, or 15CFM min.)

Humidity: Maximum 5% to 95% RH non-condensating.

Altitude: Operating 10,000 ft. Non- operating 40,000 ft.

Vibration: Three orthogonal axes at 1 octave/min, 5 min dwell at four major resonances at

0.75G peak, 5Hz to 500Hz.

Safety Regulatory & EMC Specifications:

MEETS FCC CLASS B, CISPR 22 CLASS B, EN55022 CLASS B - With an external input line filter

EN61000-3-2 HARMONICS

EN61000-3-3 VOLTAGE FLUCTUATION

EN6000-4-2 ESD +8KV AIR +4KV CONTACT DISCHARGE, performance criteria B
EN61000-4-3 RADIATED IMMUNITY: 80-1000Mhz 3V/m, AM 80% (1KHz), criteria A

EN61000-4-4 FAST TRANSIENT: 1KV for AC power port, 0.5KV for DC power I/O and signals Port,

performance criteria B

EN61000-4-5 SURGE: 2KV common mode and 1KV differential mode

EN61000-4-6 3VRMS, 80% A.M. BY 1kHz

EN61000-4-8 3A /m at 50Hz, performance criteria A.

EN61000-4-11 VOLTAGE Dips and interruption: 30% reduction for 10mSec –Criteria B, 60% For

100mSec. Criteria C, 95% reduction for 5000mSec Criteria C.

Dielectric Withstand:

Input to Case: Input to case: 1500VAC.

Input to Output: Input to output: 3000VAC

Output to Case: Output to case: 100VDC.

Safety Agency Compliance: UL 60950

CSA C22.2 -234, LEVEL 3.

EN-60950 CE - MARK

Leakage Current: 1mA @50/60 Hz , 264Vac input.

MTBF: 300,000 hours minimum per BELCOR 332,issue 6 specification @30 degrees C (Max.

junction temperature 110°C, Capacitors 105°C)

Mechanical Dimensions

Size 127mm x 84mm x 38.0mm

Weight 650 Gr.

Input AC Connector (J1) 3 Pin Molex 26-48-1055

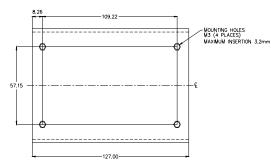
Output Connector V1 (J2) 6 Pin Molex Type 26-48-10xx V2 (J3) 2 Pin Molex Type 26-48-1025

Command & Control Connector (J4) 6 Pin Molex Type 22-27-2061

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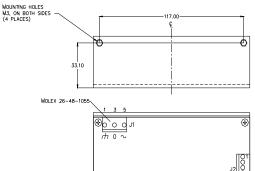




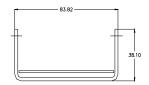


J.	3 PINOUT
1	V2 RTN
2	V2

	J# PINOUT
1	INHIBIT
2	V1 +SENSE
3	V1 -SENSE
4	DC FAIL
5	V1 CURRENT SHARE
6	5V AUX



MOLEX 26-48-1025



MOLEX 22-27-2061

| MATING CONNECTOR FOR 'JI' MOLEX | CRIMP TERMINAL 08-52-0072 (x3) | CRIMP TERMINAL 08-52-0072 (x6) | CRIMP TERMINAL 08-52-0072 (x6)

MATING CONNECTOR FOR 'J3' MOLEX CRIMP TERMINAL 08-52-0072 (x2) HDUSING 09-50-3021 (x1)

MATING CONNECTOR FOR 'J4' MOLEX CRIMP TERMINAL 08-50-0114 (x6) HDUSING 22-01-2065 (x1)

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