Medical Industrial Test Comm Broadcast

Single Output 350W Medical & ITE Power Supplies

Features	Benefits
• IEC60601 3rd Ed. (2x MoPP)	• Suitable for B and BF type medical equipment
• 350W Convection cooled rating	• No fan noise, good for noise-sensitive environments
• Low profile (40 mm)	• Suits 1U applications, saves space
• Low off-load power draw (<0.5W)	• Better "environmental footprint"
• 5V Aux & 12V fan supply (F-option)	• Embedded features save cost of external circuitry
• Operating altitude up to 5000m	• Supports global use



Specification

Model		CUS350M/F
AC Input Voltage	VAC	85 - 265VAC (1)
Input Frequency	Hz	47 - 63Hz
DC Input Voltage	VDC	120 - 370VDC (No safety certification)
Inrush Current (cold start)	A	20A at 115VAC, 40A at 230VAC
Power Factor	-	Meets EN61000-3-2 (Typical PF 0.99/0.95) (2)
Input Current (115/230VAC)	A	4 / 2A (350W output)
Off-load Power Draw (3)	W	<0.5W at 230VAC
Temperature Coefficient	%/°C	<0.02%/°C
Overcurrent Protection	-	12V: >36A, 18V: > 24A, 24V: > 18A, 48V: > 9A
Overvoltage Protection (4)	V	12V: 13.8 - 16.2V, 18V: 20.7 - 24.3V, 24V: 27.6 - 32.4V, 48V: 55.2 - 64.8V
Hold Up Time (115 / 230V input)	ms	20ms at 350W output
Leakage Current	mA	<0.3mA
Remote Sense	-	Yes
Remote On/Off	-	Yes: Apply voltage to isolated terminals to shut unit down
Power Good	-	Yes: Isolated transistor, On = Good
Operating Temperature	°C	-20°C to +70°C Derate linearly to 50% load from 40°C to 70°C
Storage Temperature	°C	-40°C to +85°C
Humidity (non condensing)	%RH	10 - 95%RH (Operating & Storage)
Cooling	-	Convection or Forced Air Cooled
Withstand Voltage	-	Input to Ground 2kVAC (1xMOPP), Input to Output 4kVAC (2xMOPPs), Output to Ground 1.5kVAC (1xMOPP) BF Rated
Isolation Resistance	-	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC
Vibration (non operating)	-	10 - 55Hz: 19.6m/s^2 constant sweep 1 min X, Y, Z for 1 hour
Shock	-	< 196.1 m/s^2 (20G)
Immunity	-	IEC61000-4-2 (lv 2, 3), -3 (lv3), -4 (lv 3), -5 (lv3, 4), -6 (lv 3), -8 (lv 4), -11
Safety Agency Certifications	-	EN/IEC/UL/ES/CSA 60601-1, EN/IEC/UL/CSA60950-1, CE Mark
Conducted & Radiated EMI	-	EN55011-B, EN55022-B, FCC Class B (Radiated Class A)
Weight (Typ)	g	850
Size (LxWxH)	mm	190 x 87 x 40
Warranty	yrs	3

Notes:

(1) Derate linearly to 80% load from 115 to 85VAC input

(2) 115 / 230VAC input

(3) During Remote off and at no load condition

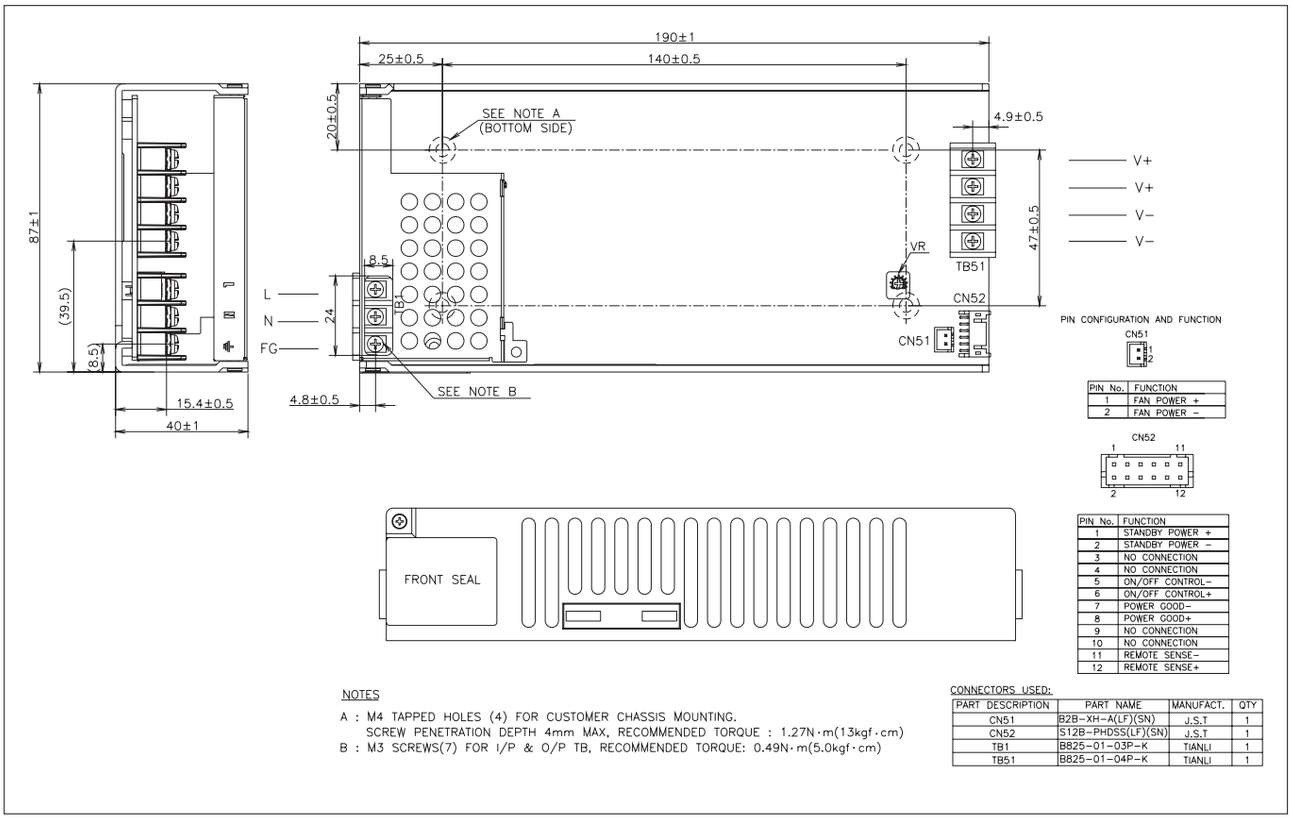
(4) Cycle AC to reset

Model Selector

Model	Voltage	Range (V)	Current (A)	Power (W)	Reg (mV)	Reg (mV)	Noise (mV)	Efficiency (typ) % (5)
CUS350M-12/F	12V	11.4 - 12.6	29.0	348.0	60	48	120	91 / 93
CUS350M-18/F	18V	17.1 - 18.9	19.4	349.2	90	72	180	91 / 94
CUS350M-24/F	24V	22.8 - 25.2	14.7	352.8	120	96	240	91 / 94
CUS350M-48/F	48V	45.6 - 50.4	7.3	350.4	240	192	480	91 / 94

Notes: (5) 115 / 230VAC input. 350W output power

Outline Drawing CUS350M Series



PIN CONFIGURATION AND FUNCTION

CN51

PIN No.	FUNCTION
1	FAN POWER +
2	FAN POWER −

CN52

PIN No.	FUNCTION
1	STANDBY POWER +
2	STANDBY POWER −
3	NO CONNECTION
4	NO CONNECTION
5	ON/OFF CONTROL−
6	ON/OFF CONTROL+
7	POWER GOOD−
8	POWER GOOD+
9	NO CONNECTION
10	NO CONNECTION
11	REMOTE SENSE−
12	REMOTE SENSE+

NOTES

A : M4 TAPPED HOLES (4) FOR CUSTOMER CHASSIS MOUNTING.
SCREW PENETRATION DEPTH 4mm MAX, RECOMMENDED TORQUE : 1.27N·m(13kgf·cm)
B : M3 SCREWS(7) FOR I/P & O/P TB, RECOMMENDED TORQUE: 0.49N·m(5.0kgf·cm)

CONNECTORS USED:

PART DESCRIPTION	PART NAME	MANUFACT.	QTY
CN51	B2B-XH-A(LF)(SN)	J.S.T	1
CN52	S12B-PHDSS(LF)(SN)	J.S.T	1
TB1	B825-01-03P-K	TIANLI	1
TB51	B825-01-04P-K	TIANLI	1

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