DATA SHEET
High Accuracy Current Sensor

P/N: CFB5000ITM24D1250 | **I_{PN}=5000A**

Feature

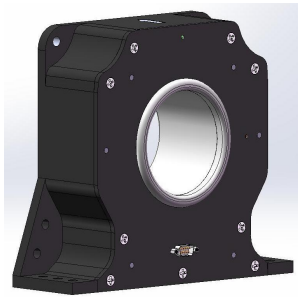
- It is a current sensor, based on the principle of fluxgate principle.
- Electrostatic shield between primary and secondary circuit
- It provides accurate electronic measurement of DC, AC or pulsed voltage.
- Supply voltage: ±22~ ±26 V

Advantages

- High accuracy
- Wide frequency bandwidth
- Low temperature drift
- Very good linearity
- Optimized response time

Applications

- Metrological verification and calibration
- Laboratory current measurement
- Instrumentation (e.g. power analyzer)
- Medical equipment (e.g. MRI)
- Battery pack detection
- Power control



RoHS

Electrical data: （T_A=25℃±5℃）

Parameters \ Type	CFB5000ITM24D1250		
Rated Input I_{PN}(A)	±5000		
Measuring Range I_{PM}(A) 1Min/Hour	±6000		
Current consumption I_C (mA) I_{PM} Range	Minimum	Standard	Maximum
	±60	±1310	±1560
Power Supply V_C	±22	±24	±26
Current change Input:Output K_N	4000：1		
Rated Output Current(I_{SN})mA	--	±1250	--

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Measuring Resistance(Ω) R_M	0	1	2
Accuracy Xe (A) @0%~16%I_{PN}	--	--	0.008
Accuracy Xe (V) RD% @16%I_{PN}~I_{PM}	--	--	0.001
Ratio error X_{Ge} (A) @0%~16%I_{PN}	--	--	0.008
Ratio error X_{Ge} RD% @16%I_{PN}~I_{PM}	--	--	0.001
Angle error X_{Pe} crad	--	--	0.01
Linearity ε_L (ppm)	--	--	5
Temperature drift coefficient TCI ppm/K	--	--	0.2
Time drift coefficient TT ppm/month	--	--	0.5
Power supply anti interference TV ppm/V	--	--	1
Zero offset current I_O （mA） 25±10℃	--	--	±0.002
Zero offset current I_{OT}（mA） Within the full operating temperature range	--	--	±0.004
Ripple current In DC-10Hz (ppm)	--	--	1
Dynamic response time tr(us) di/dt=100A/us rise to 90%I_{PN}	--	--	1
Bandwidth(- 3dB) F (kHz)	0	--	100

Insulation Coordination：

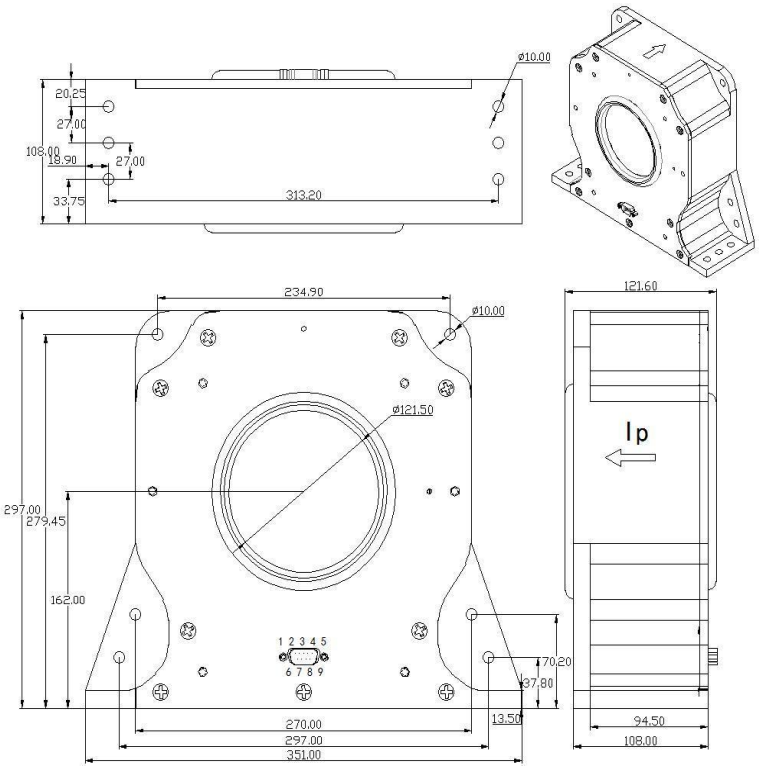
Item	Symbol	Test condition	Value	Unit
RMS voltage for AC insulation test	V_d	50Hz/1Min between primary and secondary	5	KV
Impulse withstand voltage	V_w	50us between primary and secondary	8	KV

General data：

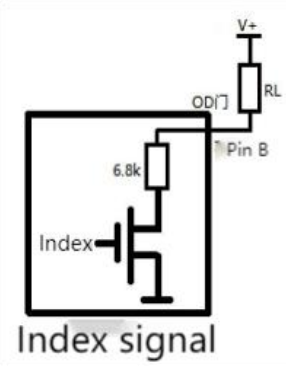
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-45~ +85
Mass M(g)	12000g±1500g

Standards	IEC60950-1:2001
	EN50155:2007;EN50121:2006
	SJ20790-2000
	UL94-V0
	EN60947-1:2004

Dimensions(mm):



Pin No	Pin Definition
1	CND
2	NC
3	CND
4	CND
5	-VCC
6	Signal Output
7	NC
8	Effective instuction
9	+VCC



Note:
Normal operation of the product refers to
The indicator light remains constantly on, and pin 8 outputs

Low level. Abnormal operation of the product
When in operation, the indicator light is always on
Off, pin 8 outputs a high level

Remarks:
1. All dimensions are in mm.
2. General tolerance ±5mm.

Connector: DB9.

Remarks:

- Before using the product, please make sure to carefully read the user manual.When moving the product, please make sure to turn off the power first and unplug all the connecting cables that are connected to it.If any damage is found to the casing, firmware, power cord, connecting cable, or connected equipment, please immediately disconnect the device from the power supply. and If there are any concerns about the safe operation of the equipment, please immediately shut down the equipment and its related accessories, and contact our company's technical support department as soon as possible to communicate and resolve the issue.
- When the direction of the input current IP is consistent with the direction indicated by the arrow in the outline drawing, the output current IS is in the forward direction.
- Please try to locate the primary conductor at the center of the probe aperture as much as possible.
- This module is a standard sensor, please contact us for special applications.
- We reserve the right to modify this sensor manual without prior notice.

WARNING : Incorrect wiring may cause damage to the sensor.