

# TM2000 / 2030 Precision Current Source



\*The drawing is for reference only. There may be some differences according to different technical specifications

## 1. Summary

The **TM2000 / 2030** is a series of precision excitation current sources with high precision, high resolution regulation, high stability and other characteristics. It can be used as excitation power supply of field generator such as Helmholtz coil and solenoid to generate standard magnetic field. It's applied for the influence test of materials, devices and instruments or the calibration of magnetic sensors and other applications.

## 2. Features

- Single or three channel output are optional.
- Current output can produce a magnetic field ( $\pm$ ).
- Optimal short-term stability is 20ppm/min.
- Open loop or closed loop two test modes.
- Open loop can set current or magnetic field value output.
- Closed loop can realize feedback measurement with magnetic sensor.
- Support a variety of value setting and adjustment.
- Support cascaded expansion of current or power output.
- Open circuit, overload, and overheating protection.

### 3. Specifications

#### 3.1 Constant Current Output

Specifications		TM20X0-5A-30V	TM20X0-25A-12V	TM20X0-25A-24V
Current Range		1A, 5A	1A, 5A, 25A	1A, 5A, 25A
Short-term Stability ( ppm/min )	Class 0.05	100	100	100
	Class 0.02	50	50	50
	Class 0.01	30	30	30
	Class 0.005	20	20	20
Accuracy ±(ppm of reading + ppm of range) <sup>①</sup>	Class 0.05	300 + 200	300 + 200	300 + 200
	Class 0.02	120 + 80	120 + 80	120 + 80
	Class 0.01	60 + 40	60 + 40	60 + 40
	Class 0.005	30 + 20	30 + 20	30 + 20
Maximum Load Voltage of Single Channel <sup>②</sup>		30 V	12 V	24 V
Maximum Load Power of Single Channel		150W	300W	600W

Note: <sup>①</sup>(ppm = parts per million) (e.g., 10ppm = 0.001%)

<sup>②</sup>The above is the compliance voltage of the base model , and the maximum compliance voltage after cascade is proportional to the maximum power.

### 3.2 Magnetic Field Measurement (Optional)

Fluxgate	Range	100 $\mu$ T, 1mT, 2mT
	Measuring Range	1 $\mu$ T~2mT
	Display Digits	5-dights display
	Probe	Single or triaxial fluxgate probes
Teslameter	Accuracy	$\pm$ 0.5%
	Range	30mT, 300 mT, 3000 mT
	Measuring Range	2 mT~3600 mT
	Display Digits	5-dights display
Teslameter	Accuracy	0.5%

### 4. Ordering Information

