

# Component Parameter Test Instruments

## A. TH1773 DC Bias Current Source

### Features

- MPU control
- 20×2 large character LCD display with backlight
- Frequency bandwidth: 50 Hz – 200 kHz
- 0 to 10A current output, max power output 90 W
- Directly controllable by TH2816A, TH2817A, TH2818, and TH2819A
- Low additional error , wide frequency bandwidth
- Auto or manual current sweep output
- Single, multi and equal interval current output modes
- DC current output with forward or reverse
- 0 to 99s delay time setup
- Long time high current output available
- Optional GPIB and RS232C interface
- User control setting memory
- Strong protective design against damage of LCR meter



### TH1773

### Brief Introduction

■ TH1773 is a DC Bias Current Source (or DC Magnetization Current Source) used for inductance measurement of inductors and transformer windings with DC bias current. Except for constant current output, low additional error and wide frequency bandwidth are important for bias current inductance measurement. High frequency LCR meter could be used, when the frequency bandwidth is wide enough. MPU controlled auto current balance technology is adopted to realize AC+DC current overlap and constant current output from 0 to ±10A. TH1773 With its low additional error, wide frequency response bandwidth and sweep output function is widely used in DC biased inductance measurement. It also provides a perfect solution for magnetic material analysis.

### Specifications

Current Range	-10A – 10A
Current Resolution	200 mA Range: 0.1 mA 2A Range: 0.001A 10A Range: 0.01A
Frequency Bandwidth	50Hz–200kHz
Impedance Range	$\omega L < 2k\Omega$ , $L < 8/l$ (H)
Current Accuracy	±1% of reading ±3 counts
Output Voltage Range	0–8 V
Additional error	≤ 1%
Current Output Mode	Single, multi and Equal interval current output
Sweep Mode	Manual, Auto(Return sweep available)
Sweep Points	2-15 points
Delay Time	0 to 99s
Warm-up Time	20 minutes
Working Time	continuous work up to 24 hours
Optional Interface	RS232C (used for LCR meter control )

### General Specifications

Operating Temperature and Humidity	0°C–40°C, ≤90%RH	
Power Requirements	Voltage	198V–242V
	Frequency	47.5Hz–52.5Hz
Power Consumption	≤ 200 VA	
Dimensions (W×H×D)	430mm×180mm×460mm	
Weight	Approx. 16.4kg	

### Ordering Information

TH1773 DC Bias Current Source

### Instrument Accessories

TH26004E-1 Bias current source link cable

TH26013 DC bias test clip leads

TH2881-001 Foot switch