

TH0300 High Power Resistor Standard



1. Summary

TH0300 is a series of reference high power resistance standards, it's applied for precise AC and DC current measurement at high power conditions.

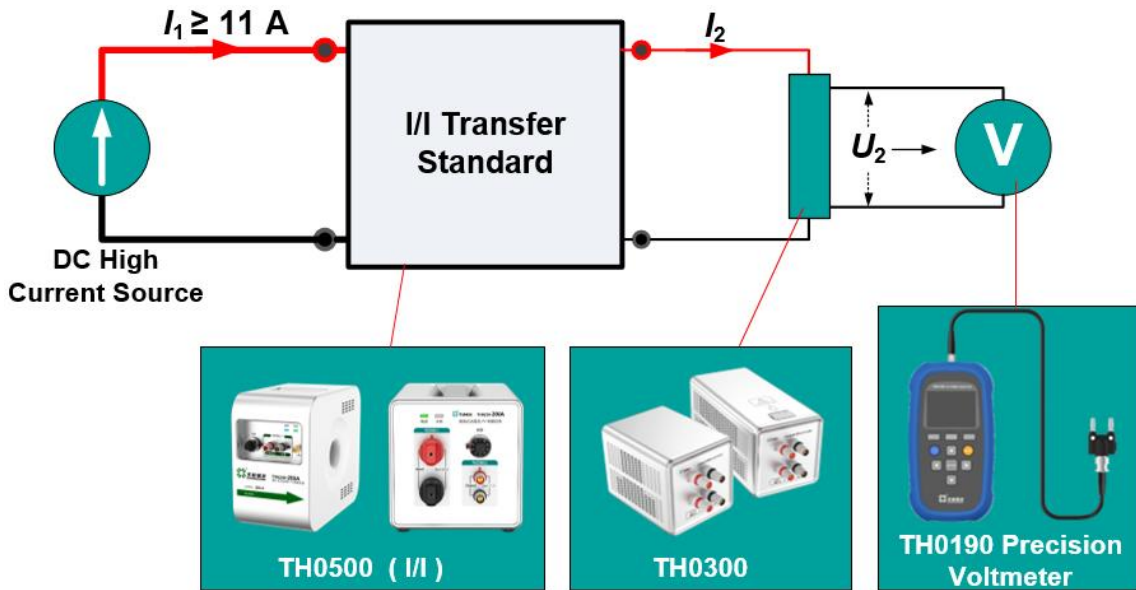
2. Features

- Nominal resistance: 0.1 Ω ~ 10 Ω
- Maximum operating current: 11 A
- Long-term stability: 5 ppm/year (typical)
- Temperature coefficient: 1 ppm / $^{\circ}\text{C}$
- Low thermal potential
- On-site test

3. Applications

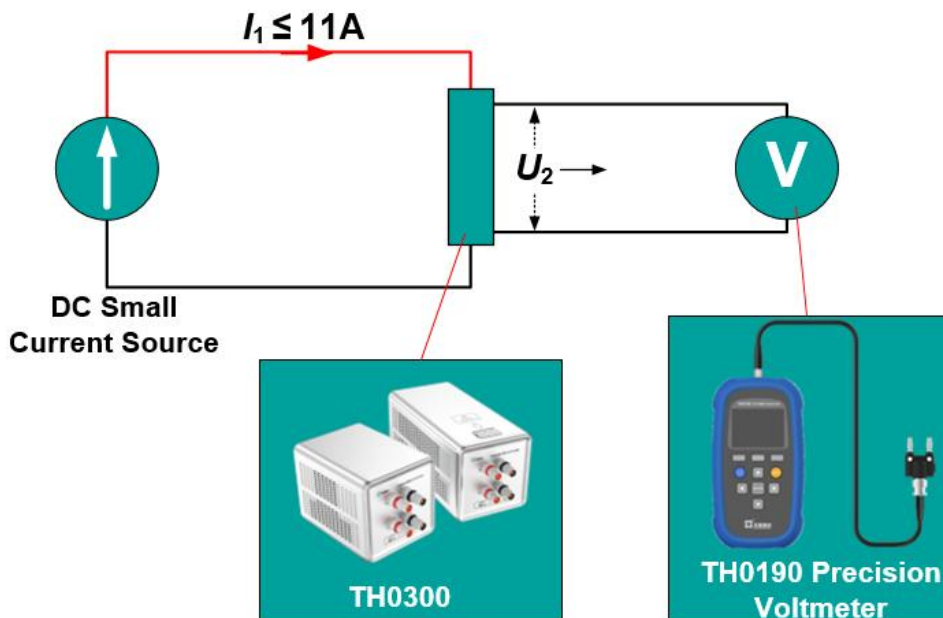
- Establish high precision current measurement system
- Calibrate the DC current standard source
- Calibrate high precision resistance meter

☆ DC High Current Precision Measurement



- When $I \geq 11\text{ A}$, establish the current measurement system with I/I transfer standard and precision voltmeter.

☆ DC Small Current Precision Measurement



- when $\leq 11\text{ A}$, TH0300 can be directly used as I/V transfer standard.

4. Specifications

Model	Nominal Resistance @ 23°C	Initial Deviation (±ppm)	Accuracy (±ppm)	Annual Stability (±ppm)	Maximum Current (A)	Temperature Coefficient (±ppm/°C)
TH0300-0.1R	0.1 Ω	5	2.5	15	11.0	1
TH0300-0.2R	0.2 Ω	5	2.5	15	5.5	1
TH0300-0.5R	0.5 Ω	5	2.5	15	2.2	1
TH0300-1R	1 Ω	5	2.5	5	1.1	1
TH0300-2R	2 Ω	5	2.5	5	0.55	1
TH0300-5R	5 Ω	5	2.5	5	0.22	1
TH0300-10R	10 Ω	5	2.5	5	0.11	1

5. General Specifications

Power supply	—
Temperature performance	Operating temperature: 18 °C ~ 28 °C; Storage temperature: -10 °C ~ 55 °C;
Humidity performance	Operating humidity: (40%-60%) R·H, no condensation; Storage humidity: 95% R·H, no condensation;