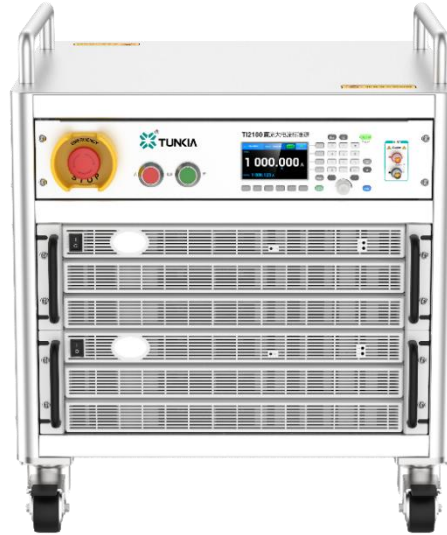


# TI2100 High-stable DC High Current Standard Source



\*Reference only

## 1. Summary

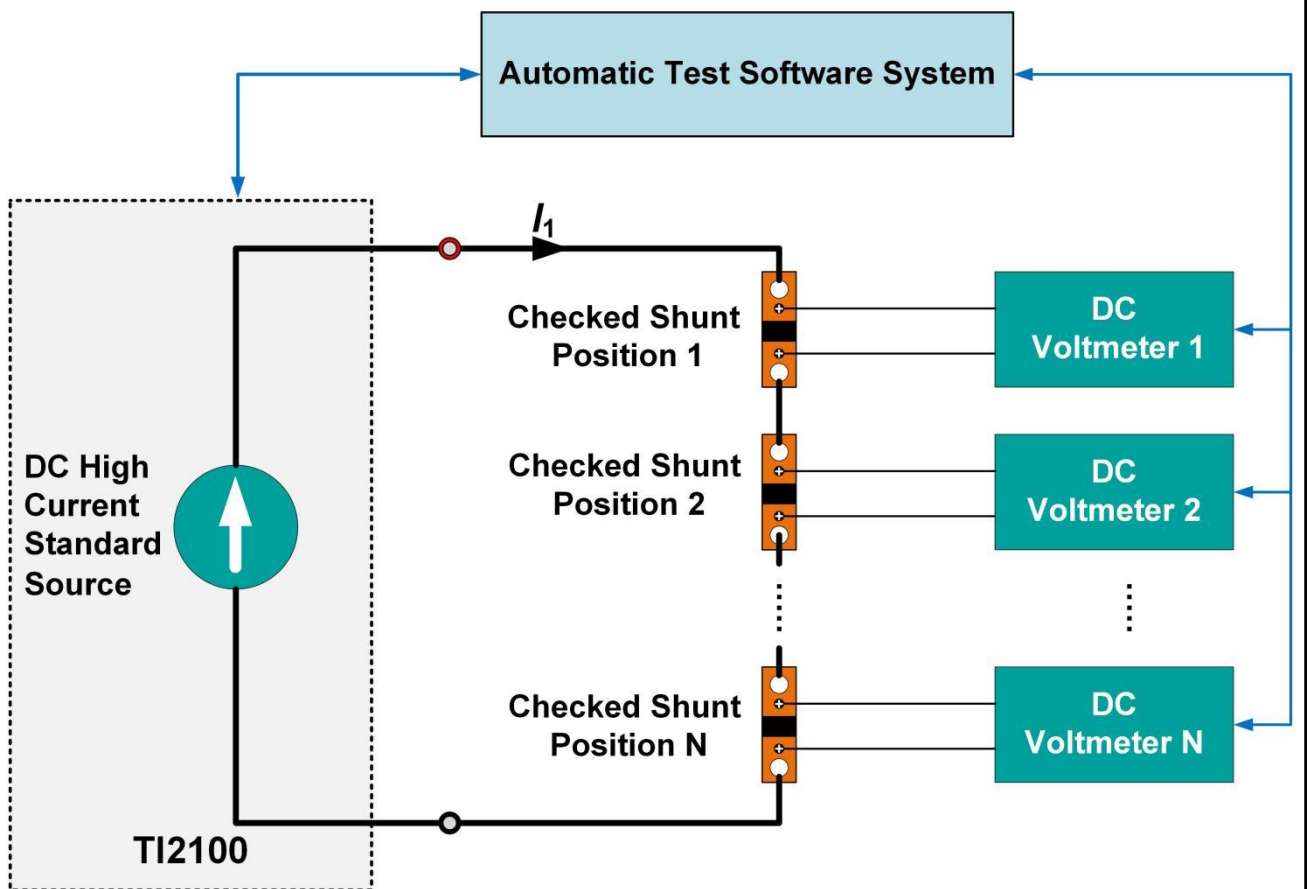
TI2100 is a series of high-stable DC high-current standard sources for industrial testing, which adopts a modular design and supports the combined output of multiple sources to adapt application scenarios with different current specifications.

## 2. Features

- Accuracy: class **0.01**.
- Single current range, no relay shifting.
- Short-term stability is typically better than **0.003% \* FS**.
- The maximum load voltage of the constant current output is **10 V**.
- The unipolar source can be connected to an external commutator (accessory) to realize current commutation.
- A bipolar source (option) generates forward and reverse currents directly through the circuit.
- The constant current output ripple coefficient is less than 0.1%.
- LAN, RS232 interfaces.

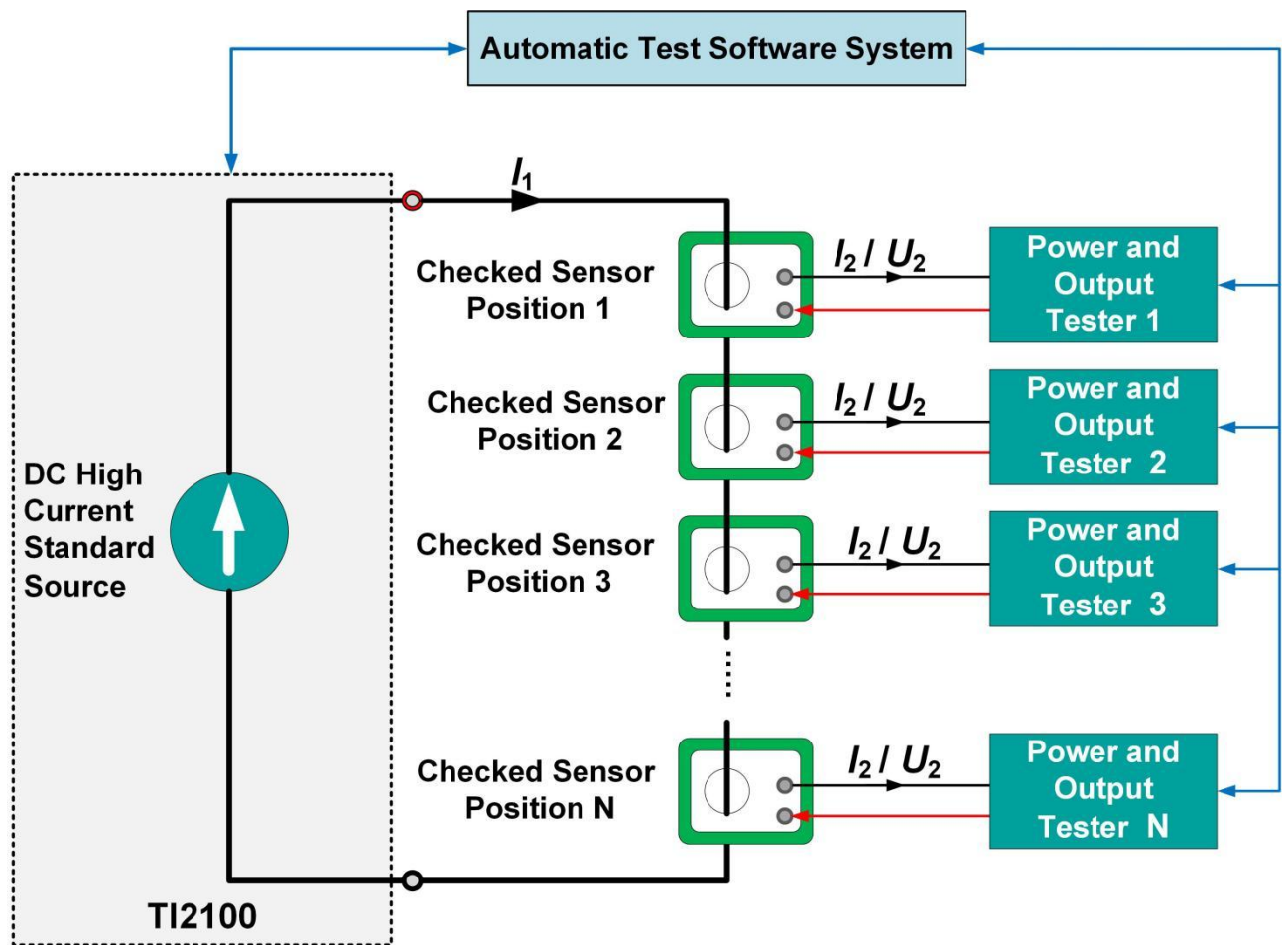
### 3. Applications

#### ☆ DC Shunt Testing



- Supports standard source method calibration and testing of DC shunts (optional voltage measurement module required).
- The load voltage of up to **10 V** is suitable for the simultaneous detection of multiple shunts in the production line.  
(Note: The number of simultaneous access is related to the load size of the shunt under test).
- Support docking with the user's automated test system (or customized software) to achieve automatic testing.
- Supported test items include: basic error test, error consistency test, error stability test, measurement repeatability test, shunt thermal balance test, overload test, etc.

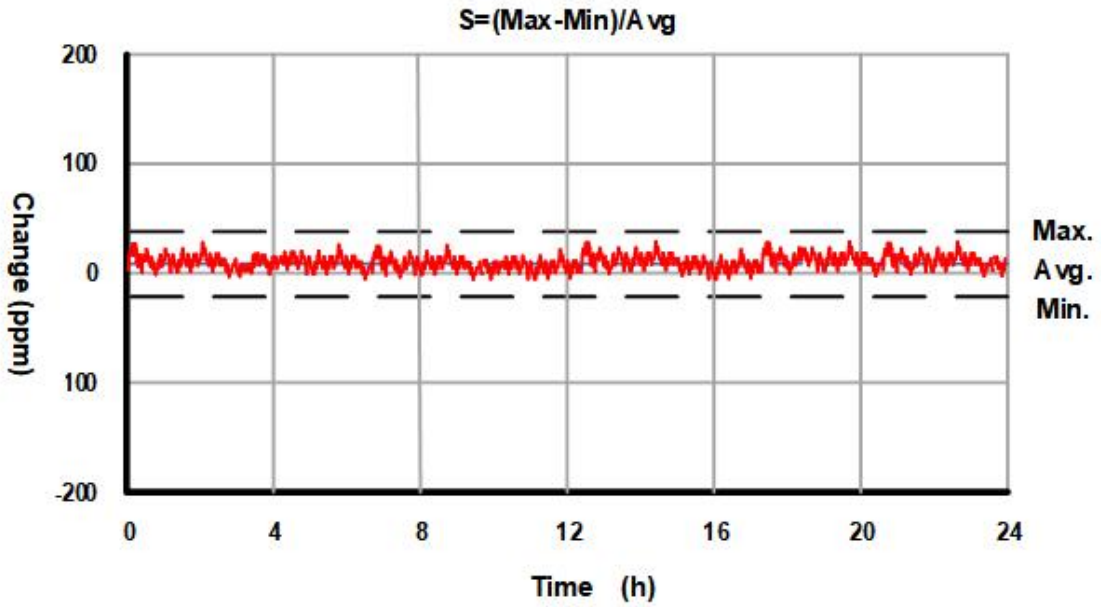
## ☆ Current Sensor Testing



- The standard source method is used to calibrate and measure the current sensor.
- It is also suitable for the simultaneous detection of multiple current sensors in production lines. (Note: The number of simultaneous access is related to the load size of the sensor being inspected).
- Support docking with the user's automated test system (or customized software) to achieve automatic testing.
- Supported detection items include: basic accuracy error, zero output error, full-scale output error, linearity error, return difference, repeatability error, etc Zero point drift, thermal zero drift (with temperature control box), thermal sensitivity drift (with temperature control box), overload capacity, power influence, The rate of change of load (with load box), etc.

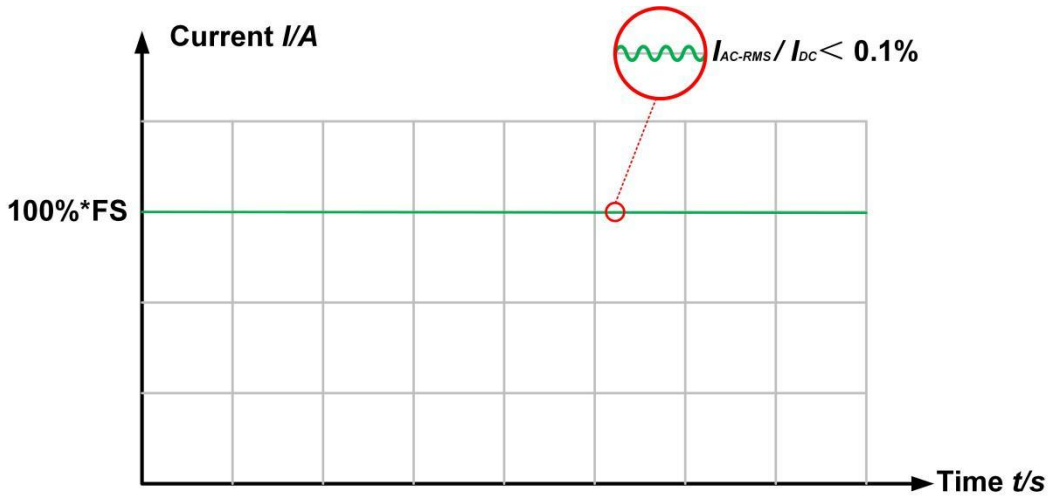
### 4. Characteristics

#### ☆ High Stability



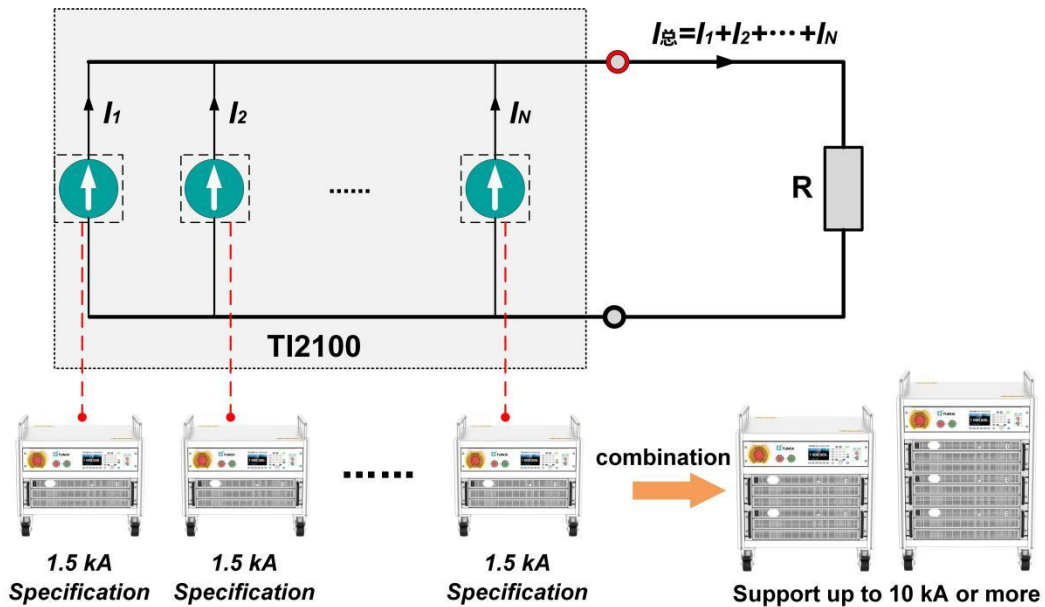
- Short-term stability typical: 0.003 %/h.

☆ Low Ripple Content



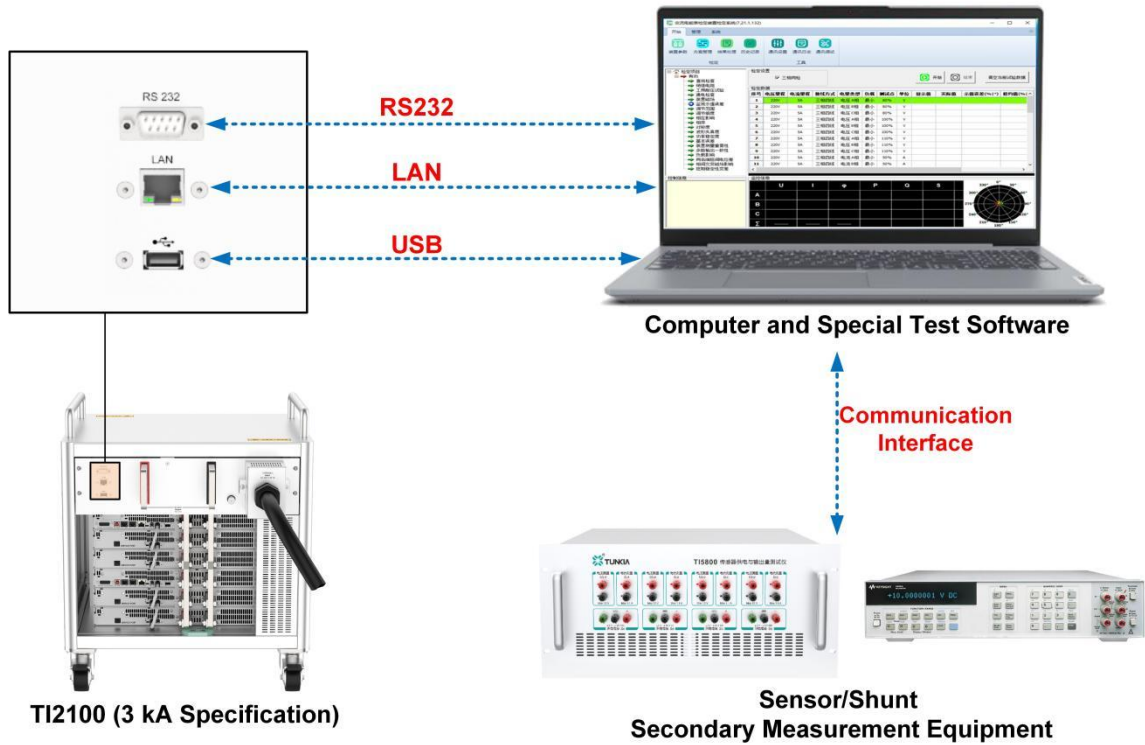
- TI2100 current ripple content is better than 0.1%, which can reduce the noise interference caused by DC ripple and ensure the accuracy of test results; At the same time, it avoids surge voltage or current caused by strong ripple to ensure the safety of equipment operation.

☆ Module Source Combination Output



- TI2100 supports DC high-current output in combination of multiple module sources, up to 10 kA or more;
- It is equipped with a control module to adjust multiple source outputs, improve the current sharing coefficient, and ensure the stability and accuracy under high-current output.

☆ Multi-type Digital Communication Interface



- USB, LAN, RS232 interfaces.
- Note: Customized software are available.

## 5. Specifications

<b>Device Rating</b>		Class 0.01
<b>Range</b>	<b>N*1.5k A Specification</b>	N * 1.5 kA
<b>Output Range</b>		(1% ~ 100%)*RG
<b>Current Commutation</b>		Supports external commutator (option). Supports bipolar outputs (function option)
<b>Maximum Load Voltage</b>		10 V
<b>Short-term Stability</b>		0.003%*FS
<b>Measurement Uncertainty (k=2)</b> ppm*RD <sup>①</sup> +ppm*RG <sup>②</sup>		60 + 40
<b>Ripple Coefficient</b>		≤ 0. 1%
<b>Settling Time</b>		≤1 s
<b>Circuit Protection</b>		Open circuit protection, overload protection, overtemperature protection
<b>Note</b>		(1) RD is the reading value, (2) RG is the range value

## 6. General Specifications

<b>Power Supply</b>	Three-phase five-wire, AC 38 0 V ± 38 V, 50 Hz ± 2 Hz
<b>Quality (3 kA size).</b>	84.5 kg
<b>Working Environment</b>	0°C ~ 50°C, (20% ~ 85%) R· H, non-condensing
<b>Storage Environment</b>	-20°C ~ 70°C, <85% R· H, non-condensing
<b>Communication Interface</b>	LAN、RS232、USB

## 7. Ordering Information

