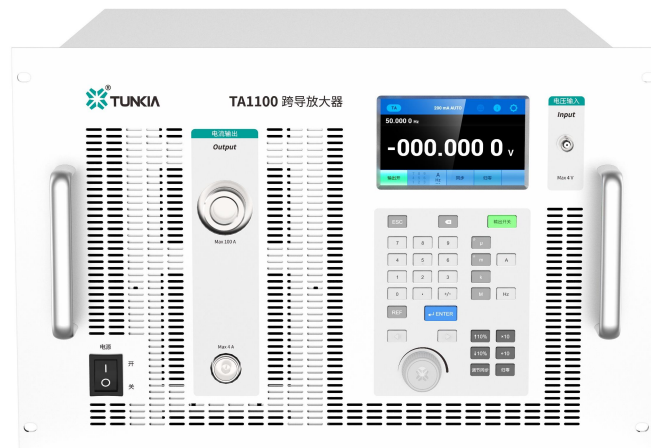


# TA1100 Transconductance Amplifier



## 1. Summary

TA1100 is a high-precision, high stability wideband current standard source, with built-in signal generator, which can directly output wideband current. It can also be used as a wideband transconductance amplifier to receive AC and DC voltage signal input from any calibrator, signal generator or power supply, and transconductance output wideband current.

## 2. Features

- Accuracy: Class 0.05
- Operating frequency: DC ~ 100 kHz
- Maximum output current: 100 A
- The short-term stability is up to 0.004%
- Maximum compliance voltage: 7 V<sub>rms</sub> @ AC, 7 V @ DC
- Equipped with LCD touch screen
- Can be used as broadband current standard source with the built-in signal generator.

## 3. Application

- Expand the current output range of multifunction source
- Calibrate broadband coaxial shunt
- Calibrate CT

- Calibrate sensors
- Calibrate wideband ammeters
- Calibrate power meters

## 4. Specifications

### 4.1 AC/DC Current Output

Range	Output Current	Input Voltage	Transconductance
2 mA	0.2 mA ~ 4 mA	0.2 ~ 4 V	1 Millsiemen
20 mA	2 mA ~ 40 mA	0.2 ~ 4 V	10 Millsiemens
200 mA	20 mA ~ 400 mA	0.2 ~ 4 V	100 Millsiemens
2 A	0.2 A ~ 4 A	0.2 ~ 4 V	1 Siemen
20 A	2 A ~ 40 A	0.2 ~ 4 V	10 Siemens
100 A	5 A ~ 100 A	0.2 ~ 4 V	25 Siemens

Frequency (Hz)	10min Short-term Stability $\pm(\%*RD + \%*RG)^{[1]}$	One-year Accuracy $\pm(\%*RD + \%*RG)^{[1]}$
DC	0.002 + 0.002	0.02 + 0.02
10 ~ 10 k	0.005 + 0.005	0.05 + 0.05
10 k ~ 20 k	0.010 + 0.010	0.10 + 0.10
20 k ~ 50 k	0.015 + 0.015	0.15 + 0.15
50 k ~ 100 k	0.030 + 0.030	0.30 + 0.30

**Note:** [1] RD is the reading value, RG is the range value.

- Current output: 0.2 mA ~ 100 A
- The maximum compliance voltage is 7 V<sub>rms</sub> @ AC, 7 V @ DC
- Accuracy of frequency measurement: 0.01%

### 4.2 Distortion Uncertainly(1 year)

Frequency	Distortion
10 Hz ~ 10 kHz	±0.1%
10 kHz ~ 20 kHz	±0.2%
20 kHz ~ 50 kHz	±0.3%
50 kHz ~ 100 kHz	±0.6%

## 5. General Specifications

<b>Power Supply</b>	AC ( 220 ± 22 ) V, ( 50 ± 2 ) Hz
<b>Warm up time</b>	Twice the time since last warmed up, to a maximum of 30 minutes.
<b>Operating environment</b>	10°C ~ 35°C, (20%~80%) R·H, non-condensing
<b>Storage environment</b>	-20°C ~ 60°C, <80% R·H, non-condensing
<b>Communication interface</b>	RS232×1、USB×1、LAN×1