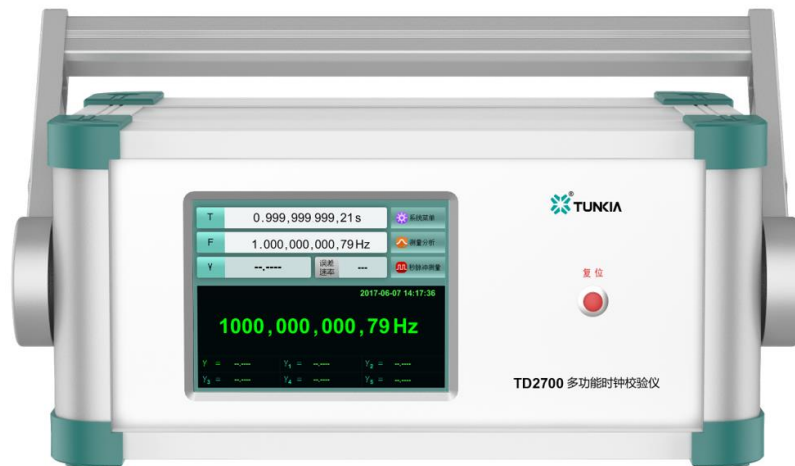


TD2700 Multi-Function Time Calibrator



1. Summary

TD2700 is a multi-functional clock test instrument that can be used for pulse timing, frequency counting tests and GPS absolute clock reception. It is especially suitable for the verification and calibration of clock signals such as device second pulses and instrument timing.

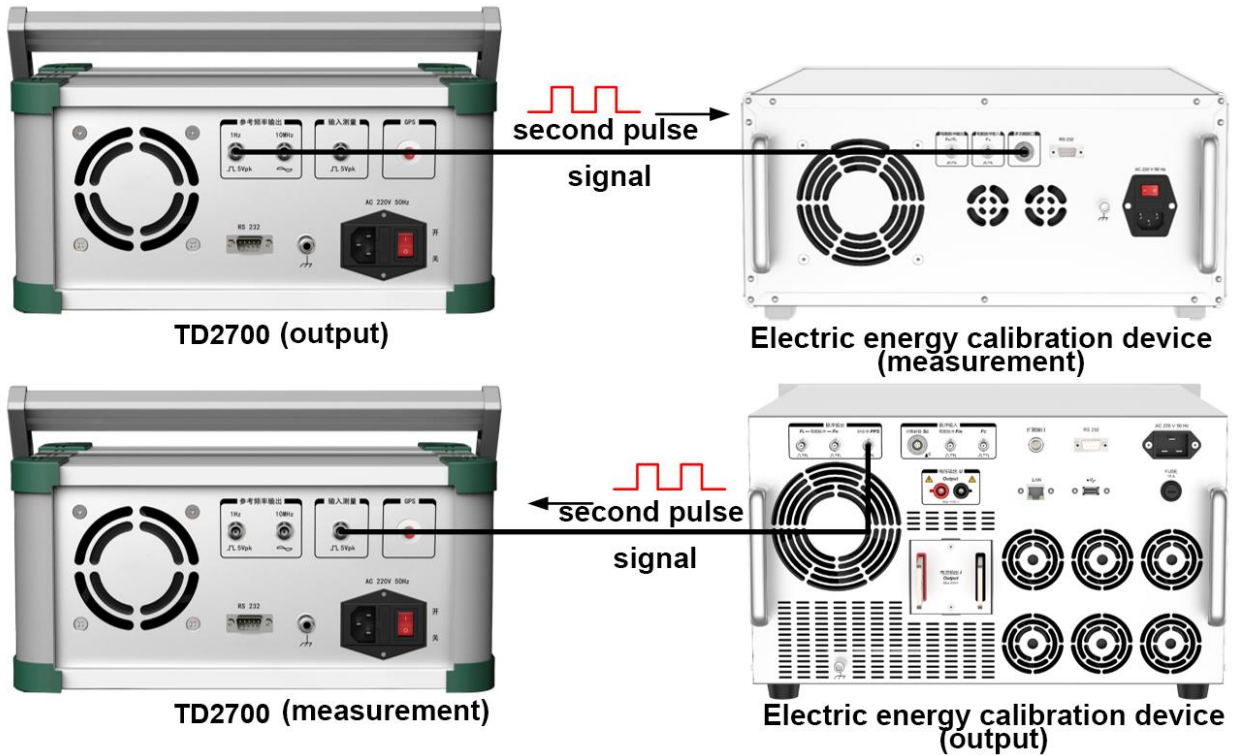
2. Features

- Internal time base annual accuracy up to 20 ppb (0.02 ppm)
- 1 Hz second pulse square wave output
- 10 MHz sine wave reference frequency output
- 0.5 Hz~10 MHz square wave signal measurement
- Display digits up to 12 digits
- RS232 interface
- Large color screen display

3. Application

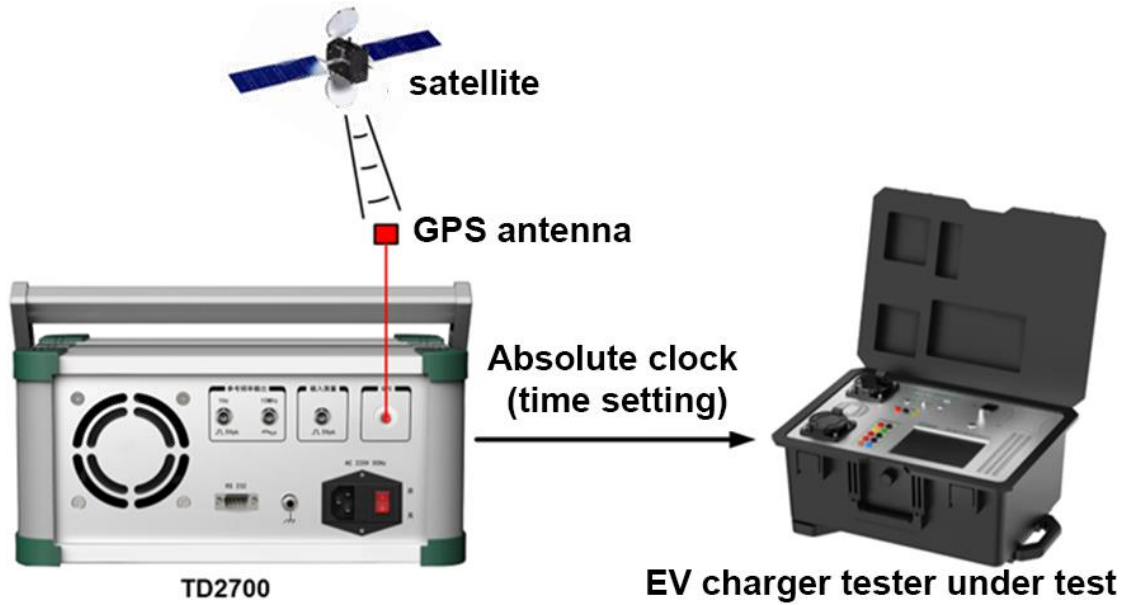
- Calibration of daily timing errors of electrical energy devices
- Absolute clock of the device (timekeeping)
- Frequency meter calibration
- High frequency square wave signal measurement
- Square wave pulse signal source calibration

☆ Daily Timing Error of Calibration Device



- There are the following two ways to calibrate the daily timing error of electrical energy devices.
- It can output pulse signals per second with an accuracy of up to 20 ppb (0.02 ppm).
- Use the frequency measurement function of the instrument to measure the second pulse signal output by the device.

☆ Device Absolute Clock (Timekeeping)



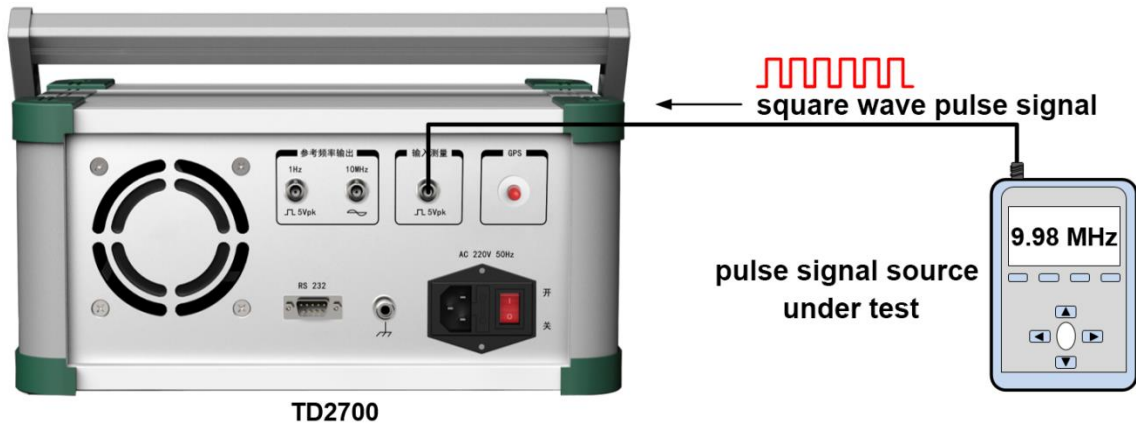
- Built-in GPS clock module, real-time clock display, and absolute clock synchronization with EV charger testers and other equipment.

☆ Frequency Meter Calibration



- TD2700 can output a sine wave reference signal with a fixed frequency of 10 MHz, which can be used to calibrate frequency meters.

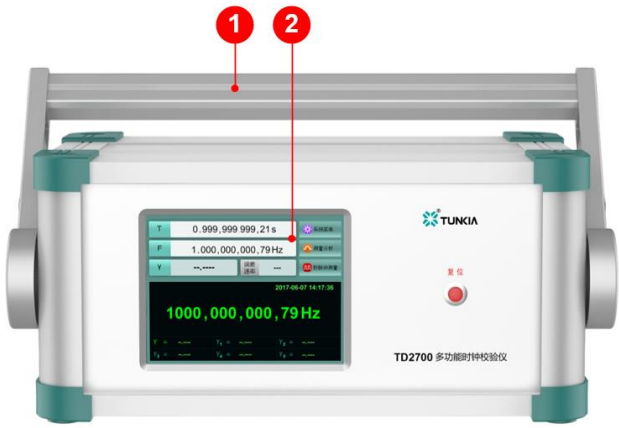
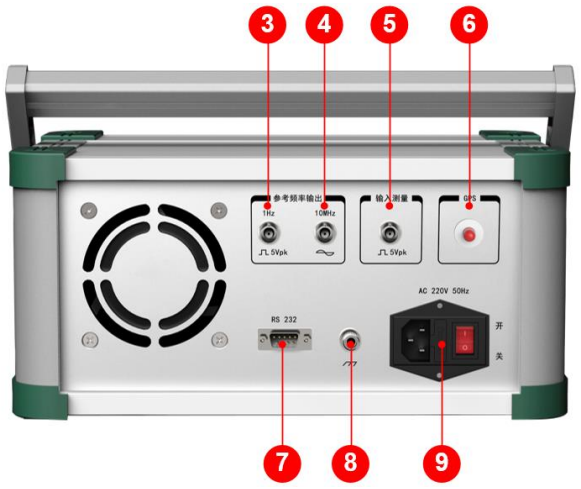
☆ Square Wave Pulse Source Calibration



- TD2700 has a square wave pulse measurement function from 0.5 Hz to 10 MHz, which can be used to calibrate the square wave pulse source.

4. Appearance

☆ Front / Rear Panel

S/N	Function
1	Handle for easy carrying.
2	Large LCD touch screen
3	BNC interface, 1 Hz second pulse square wave output
4	BNC interface, 10 MHz sine wave reference frequency output
5	BNC interface, 10 MHz square wave signal measurement
6	GPS antenna for receiving satellite clocks.
7	RS232 communication interface
8	Chassis ground. Before using the equipment, make sure that the chassis ground is reliably grounded.
9	AC 220V power input interface with switch and fuse

5. Specification

5.1 Frequency Signal Measurement

Frequency Range (Hz)	Single	Signal Amplitude	Measurement Uncertainty (k=2)
$0.5 \leq F \leq 10$	Square Wave	$1 \sim 5 V_{pk}$	2.0×10^{-8}
$10 \leq F \leq 1 \text{ k}$	Square Wave	$1 \sim 5 V_{pk}$	5.0×10^{-8}
$1 \text{ k} \leq F \leq 100 \text{ k}$	Square Wave	$1 \sim 5 V_{pk}$	1.0×10^{-7}
$100 \text{ k} \leq F \leq 10 \text{ M}$	Square Wave	$1 \sim 5 V_{pk}$	2.0×10^{-7}

- Measuring range: 0.5 Hz ~ 10 MHz, 12-digit display
- Input: BNC socket



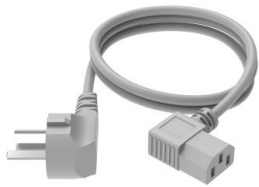



5.2 Frequency Signal Output

Frequency	Single	Single Amplitude	24-hour Stability	Measurement Uncertainty (k=2)
1 Hz	Second pulse square wave	$5 V_{pk}$	1.0×10^{-9}	2.0×10^{-8}
10 MHz	Sine wave	$5 V_{pk}$	1.0×10^{-9}	2.0×10^{-8}

6. General Specification

Power Supply	Mains power: AC (220 ± 22) V, (50 ± 2) Hz;
Maximum Power Consumption	50 VA
Temperature Performance	Working temperature: 0°C~40°C; Storage temperature: -20°C~70°C
Humidity Performance	Operating humidity: < 80% @ 30°C, < 70% @ 40°C, < 40% @ 50°C Storage humidity: (20%~80%) R·H, no condensation
Altitude	< 3000 m
Weight	About 6.5 kg
Communication Interface	RS232
Size	365 mm(W) × 240 mm(D) × 200 mm(H)

7. Accessory List

Standard Accessory		
 <p>Pulse Output Lead, 1 (BNC-BNC)</p>	 <p>Pulse Measurement Lead, 1 (BNC-BNC)</p>	 <p>AC 3-core Power Cord (10 A / 220 V)</p>
 <p>GPS Antenna, 1 (3m)</p>	 <p>Glass Fuse, 3 (F2A/250V)</p>	 <p>Aluminum Alloy Packaging Box, 1</p>

Optional Accessory	
<p>Optional Packing Box</p>	 <p>Portable instrument case, 1</p>
<p>Note: The above accessories need to be purchased separately and specified in the order contract.</p>	