

Product parameter table

Introduction to the configuration of the tower clock function:

1. Timekeeping: Fully controlled and managed a microcomputer, with screen display, two-hand operation, and the sub-clock and master clock system adopts closed-loop control to keep the sub-clock and master clock runningously.
2. Movement: The movement uses a patented worm gear and worm shaft movement from Kangbasi, with brass gears, and other components are made of 5# steel that has been quenched, adapting to various harsh environments, durable, and using a stepping motor drive with a large output torque. The movement has service life of up to 50 years.
3. GPS satellite time synchronization: The computer center and satellite signal receiving equipment are connected to separate the standard time and and correct it with the master clock time to ensure that the tower clock's operation is synchronized with the standard time, achieving no accumulated error.
4. Intelligent lighting:-saving and environmentally friendly LED daylight tubes for lighting, with a soft and beautiful lighting effect, can be continuously illuminated for 100,000 hours without; the opening and closing time is automatically controlled by the system.
5. Intelligent timekeeping: High-fidelity music clock chime

timekeeping, which can set the keeping start and stop time arbitrarily.

6. Automatic memory and automatic time-catch function: When the AC power is out, within 10 years, the master automatically memorizes, and after power is restored, the sub-clock can automatically track to the standard time without the need for special personnel to debug.

7. Synchronous of each face clock: When a face clock is out of sync with other face clocks, the control system automatically detects and adjusts it to be synchronous.

8. Antiference capability: In the design, watchdog design, software redundancy, low-pass filtering and other hardware and software measures are adopted, which has the characteristics of strong anti-inter capability.

9. Moisture-proof performance: The whole machine has the characteristics of lightning protection, rainproof, moisture-proof, and good weather resistance.

10. supply: Voltage $220V \pm 10\%$, frequency $50HZ \pm 2\%$, power 1500W.

11. assurance function: The working voltage of the whole system is 12V DC safe voltage power supply, providing effective safety protection for users.

12. Maintenance-free: The whole tower clock system is designed reasonably, has a long service life, and is maintenance-free.

Technical parameters:

1. Master clock (control cabinet), GPS signal receiving unit

- (1) Ambient temperature: -50°C 60°C
- (2) Working ambient temperature: -30°C to 60°C
- (3) Relative humidity: 30% to 5%
- (4) Timing accuracy: ± 0.04 seconds/day (no cumulative error)
- (5) Interface method: Standard RS-232
- (6) Number of interfaces: 4
- (7) Power supply: AC220V $\pm 10\%$ 50HZ
- (8) consumption: $\leq 20W$

2. Sub-clock

- (1) Ambient temperature: -50°C to 60°C
- (2) Self-t accuracy: ± 0.1 seconds/day (no cumulative error)
- (3) Torque: Greater than 98 Newton-meters
- (4) Power consumption: 25W

3. Lighting: LED daylight fluorescent lighting source

4. Timekeeping: 300W power

5. Life span: 50years of service life for the entire machine

6. Driving method: Constant current chopping and subdivision

7. Circuit board: Famous manufacturer, advantages: good insulation performance anti-aging, long service life

8. Tower clock power consumption: $\leq 120W$