



CT-DZ600E *GPS Clock*

GPS -Synchronized, Super high performance master clock

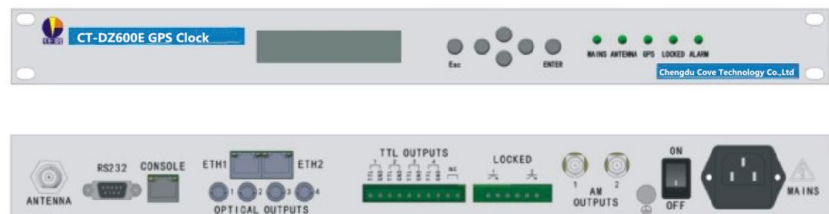
Functions

- Stratum 1 operation via GPS satellite
- multi-format outputs (NTP/SNTP, IRIG-B AC/DC, Pulse, Serial)
- Time delay compensation mechanism, compensation range: 20ns~500ms
- 1x 10/100M Ethernet interface for management
- TELNET remote configuration management
- Secure web-based management
- Support fault alarm indication

Features

- Modular design, each output can be independently configured with different signal
- Nanosecond time accuracy to UTC
- Excellent internal holdover performance when loss of time source
- High-precision time synchronization satisfies enterprise class users
- 3 years limited warranty

DATASHEET

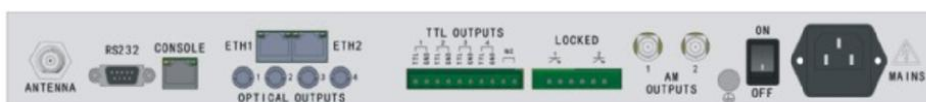


The CT-DZ600E GPS Clock receives GPS time signal, supports multi-format time output, is widely used as an industrial-class time sync device for power plants, substations, railway stations, and other automation systems. It also can be used in communications, telecom as well as other network service fields.

Time Reference : GPS L1

Support output

2 x NTP/SNTP	2 x IRIG-B AC
4 x TTL (IRIG-B DCLS, 1PPS, 1PPM, 100PPS)	1 x RS232
4 x Optical Fiber (IRIG-B DCLS, 1PPS, 1PPM, 100PPS)	1 x Network Management port
	2 x idle contact (fault alarm)



GPS RECEIVER:

Frequency: 1575.42 MHz (L1 Band)
 Channels: 12
 Sensitivity: Acquisition <-160dBW
 Tracking <-163dBW
 Acquisition: Hot Start < 2min
 Cold Start < 20min
 Tracking: Hot Start ≥ 1 Satellite
 Cold Start ≥ 4 Satellite
 Time Accuracy: ±200ns (RMS to UTC)

ANTENNA:

Frequency: 1575.42MHz
 Bandwidth: min. 20MHz
 Impedance: 50 ohm
 Gain: 30dB±2dB
 5 +/- 0.5V (25mA max)
 Operation Temp. : - 40°C ~ +85°C
 Antenna Cable: 30m low-loss cable by default

Outputs	NTP/SNTP	NTP output interface	2x10/100M Ethernet port, RJ45
		Protocols	RFC 1305 (NTP v3) ,RFC 2030 (SNTP)
		NTP time sync accuracy	1ms~100ms (Rely on the network environment)
		NTP access ability	1000 requests per second
	TTL	4 outputs, ≅75mA, 15 Ω	
		Support IRIG-B DCLS、1PPS、1PPM、100PPS outputs, each output can be configured independently	
	Optical Fiber	4 outputs, ST MMF, wave length: 820 nm	
		Support IRIG-B DCLS、1PPS、1PPM、100PPS outputs, each output can be configured independently	
	IRIG-B AC	2 outputs, BNC, 1KHz, 15 Ω	
		The output signal is in accordance with IRIG-B120 (with IEEE C37.118 CF extension) Provision	
RS232	Interface: DB9, DTE layout		
	1 output for Serial (ACEB、GPZDA、MEINBERG configurable)		
	1 output for TTL, IRIG-B、1PPS、1PPM or 100PPS optional, The polarity is configurable		
	RTS signal(optional)		
Network Management	1x10/100M Ethernet port,RJ45		
	TELNET remote configuration management is supported		
Alarm signal	2 idle contact outputs, to indicate locking status of the device		
Time Performance	Time Accuracy	≅100ns(RMS)	
	Holdover Accuracy	≅40μs/ after 1 hr (Loss of GPS after 30 mins locked)	
		≅90μs/after 2 hrs (Loss of GPS after 30 mins locked)	
Installation	19" / 1U Rack Mount		

FRONT PANEL:

LED indicators (Status): Power, Working, GPS, Tracking, Sync
Keypad: Enter, ESC, Right, Left, Up, Down Display: LCD Screen

REAR PANEL: 1 x Antenna connector, 1x RS232 port, 1 x Ethernet port for network management, 1 x Power switch & jack, 2 x NTP/SNTP, 4xTTL, 4xOptical Fiber, 2xIRIG-B AC, 2x idle contact

POWER:

110V~240 VAC, 47/63Hz, 110V~240 VDC
Power Draw: ≤15W

Operation Temperature: -10°C ~ +50°C

Storage Temperature: -40°C ~ +85°C

Humidity: < 95% non-condensing

Electricity preheating time: 8 minutes

DEVICE RELIABILITY:

MTBF: ≥45000h Lift Time: about 25 years

PACKING INFO:

Installation: 11.81"×16.93"×1.75", 19"/1U Rack

Packing Size: 565×540×210(mm)

Packing Weight: ≤7KGS(with 30m ant. cable)

APPLICATION:

