

## DTS201B PTP&NTP Master clock



### Basic Informations

- ✧ IEEE-1588 PTP Master Clock
- ✧ Support multiple PTP Profile (G. 8265.1, G. 8275.1, G. 8275.2, Telecom-2008 Profile, Enterprise Profile, Power Profile, Broadcast Profile SMPTE)
- ✧ Support systems:
  - ✧ BEIDOU and GPS
  - ✧ BEIDOU, GPS, GLONASS (Optional)
- ✧ Taking GNSS as a reference, the accuracy of time synchronization can reach 20ns (1-sigma)
- ✧ Maintain accuracy up to  $\pm 1.5\mu\text{s}/4\text{hours}$  (Locking GPS Test at fixed temperature after 1 days)

ShenZhen GEMS NAVIGATION ELECTRONICS CO., LTD.

F2, building 6, RunDongSheng Industry Park, Baoan District, Shenzhen, China

Tel: +86-755-29644311 Fax: +86-755-29644383 Email: sales@gemsnav.com

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## Product description

### DTS201B Master Clock

PTP master clock is designed for wireless networks that need phase synchronization. DTS201B provides continuously available UTC traceability time for phase synchronization, which is a prerequisite for LTE-Advanced networks and services.

DTS201B Adopt industry-leading GNSS solution and punctual technology.

DTS201B can work in harsh environmental conditions, support indoor and outdoor deployment, and has a wide working temperature range.

### Small cell Phase synchronization

While designing DTS201B for small stations, it also considers and meets the time synchronization requirements of Acer stations.

PTP DTS201B It can be used in small station networks that need phase synchronization. The most effective way to realize the phase synchronization of LTE and LTE-A services is to deploy the master clock near eNodeB to ensure the phase synchronization of 1.5 us.

By reducing the number of network hops between the time server and the LTE base station, the risk of the impact of network reconfiguration and load changes on IEEE-1588 signal quality can be reduced. DTS201B perfectly adapts to this strategy because of its small volume, low cost, high precision, excellent reliability and adaptability.

### LTE-A Ideal for service

CoMP, eICIC, eMBMS and Carrier Aggregation service requires re authentication and redesign of synchronization network to support phase synchronization function. Failure to comply with the phase synchronization specification will lead to service degradation or failure of LTE-A equipment, and reduce the bandwidth, resulting in potential service interruption.

By designing the current network to support phase synchronization, the pause time of LTE-A service can be reduced. Adding DTS201B can easily add phase synchronization to those synchronization networks. In view of its low cost, it can join any network node that needs to support strict phase synchronization function, so as to bring the best performance for LTE-A service.

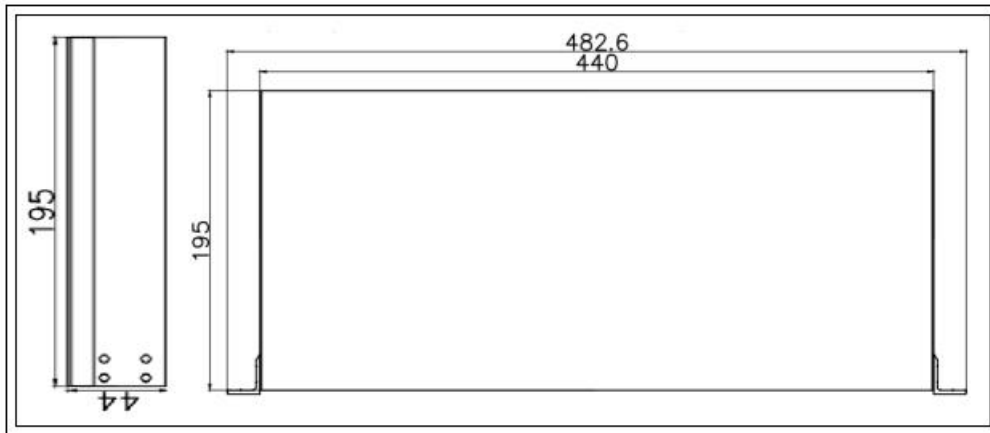
High reliability ensures that DTS201B can be deployed in boundary or aggregation networks.

## Specification Parameters

Functional interface	
Input	BEIDOU+GPS, BEIDOU+GPS+GLONASS(Option), PPS/Tod (RS232)
Output	1588 PTP 2008 V2, NTP V1-V4, 3x PPS/ToD(RS232), 1x PPS/ToD(RS422)
Network port	1x Mgmt RJ45 、1x 1G SFP 、1x 1G RJ45
GNSS Antenna interface	1x SMA
Support agreement	IEEE-1588 (PTP), NTPv4, SyncE, IPv4, IPv6, SNMP,
Network management	SNMPv2
Performance	
Time accuracy	20ns (1-sigma) reference GNSS
Timestamp accuracy	<8 ns rms
Frequency accuracy	1.16x10 <sup>-12</sup> (24 hourly average)
Keep	<1x10 <sup>-10</sup> /24 hours
Track GPS	RMS 30ns;99%<60ns
Punctual	±1.5 μs/4 hours (7 days after locking)
Power waste	5W average, 10W maximum
Physical interface	
Overall dimension	482*195*44 (L x W x H mm)
Weight	2.5kg
Power supply	-36VDC to -72VDC or 220AC
Current consumption	330mA (Max)
Environmental parameters	
Working temperature	-40° C to +85° C
Humidity	5%-95% RH No condensation(+60° C)
Storage temperature	-55° C to +105° C
Regulations and standards	
	ITU..... G. 8265. x, G. 8275. x (PRTC/T-GM)
Time synchronization	IEEE..... PTP (IEEE 1588v2)
	IETF..... NTPv4 (RFC5905)

## Product size

Equipment size: 482mm × 195mm × 44 mm (D \* W \* H)



## Ordering Information

### DTS201B-3-AC

With 220V AC power

Triple System: BEIDOU+GPS+GLONASS

Standard: BEIDOU+GPS system, with -48V isolated power.