

# DTS202B PTP&NTP Master clock



## Basic Informations

- ✧ 2 X 1G PTP SFP Output;
- ✧ Dual Antennas and Dual Receivers Supported
- ✧ Support systems:
  - ✧ BEIDOU B1 and GPS L1
  - ✧ BEIDOU, GPS, GLONASS (Optional)
- ✧ Time accuracy : 20ns (1-sigma)
- ✧ Punctual:  $\pm 1.5\mu\text{s}/4\text{hours}$
- ✧ Management: SNMP;
- ✧ IEEE-1588v2 PTP Master Clock
- ✧ Supported PTP Profile:
  - ✧ G.8265.1, G.8275.1, G.8275.2, Telecom-2008 Profile, Enterprise Profile, Power Profile, Broadcast Profile SMPTE

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## Product description

### DTS202B Master Clock

PTP master clock is designed for wireless networks that need phase synchronization. DTS202B provides continuously available UTC traceability time for phase synchronization, which is a prerequisite for LTE-Advanced networks and services. DTS202B Adopt industry-leading GNSS solution and punctual technology. It can work in harsh environmental conditions, support indoor and outdoor deployment, and has a wide working temperature range.

### Small cell Phase synchronization

While designing DTS202B for small stations, it also considers and meets the time synchronization requirements of Acer stations.

PTP DTS202B 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. DTS202B 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 DTS202B 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.

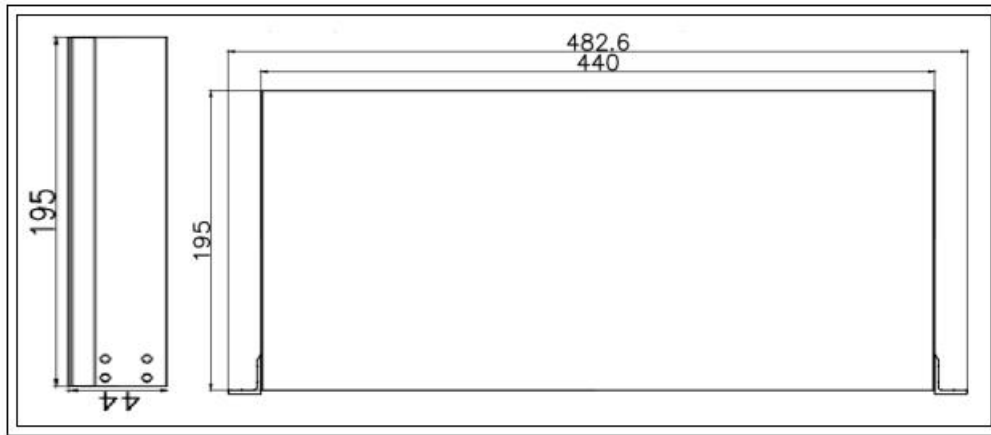
High reliability ensures that DTS202B can be deployed in boundary or aggregation networks.

## Specification Parameters

<b>Functional interface</b>	
Input	BEIDOU+GPS
Output	2x 1G SFP(1588 PTP 2008 V2, NTP V1-V4)
Network port	1x Mgmt RJ45 、 2x 1G SFP 、 2x 1G RJ45
GNSS Antenna interface	2x SMA
Support agreement	IEEE-1588 (PTP), NTPv4, SyncE, IPv4, IPv6, SNMP,
Network management	SNMPv2
<b>Performance</b>	
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	±1.5μs/4 hours (7 days after locking)
Power waste	5W average, 10W maximum
<b>Physical interface</b>	
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)
<b>Environmental parameters</b>	
Working temperature	-40°C to +85°C
Humidity	5%-95% RH No condensation(+60°C)
Storage temperature	-55°C to +105°C
<b>Regulations and standards</b>	
Time synchronization	ITU.....G.8265.x, G.8275.x (PRTC/T-GM)
	IEEE.....PTP (IEEE 1588v2)
	IETF.....NTPv4 (RFC5905)

## Product size

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



## Ordering Information

### DTS202B-3-AC

With 220V AC power

Triple System: BEIDOU+GPS+GLONASS

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