



CT-KZ001 *Time Code Distributor*

Scalable and Flexible Modular Time Distribution Unit

DATASHEET

The CT-KZ001 Time Code Distributor is designed to translate the IRIG-B time code received from the grandmaster to the other formats including serial message, pulse and NTP/SNTP profile to feed the existing traditional intelligent clients in the power plants and substations.

The distributor works with COVE grandmasters in a sync system, is available to combine with CT-TSS2000C, CT-TSS3000 as well as WTFS 9000 Grandmaster Clock.



Key Features

- ◆ Automatic operation, smart precise switchover in 0.5s in case of any interruption
- ◆ Dual IRIG-B inputs
- ◆ Multiple outputs including:
 - ◇ Serial message
 - ◇ Configurable pulse outputs
 - ◇ NTP/SNTP profile
 - ◇ IRIG-B time code (Optional)
- ◆ Internal precision time-keeping via OCXO or Rubidium
- ◆ LCD display with man-machine interaction brings a simple operation
- ◆ Redundant Dual power supplies
- ◆ Error reporting, fail alarm and self monitoring
- ◆ 19" / 3U rack mount

Support Outputs:

IRIG-B DCLS

IRIG-B AM

NTP/SNTP

Pulses (Configurable)

Serial strings

OUTPUTS & INPUTS

1PPS/1PPM/1PPH

8×1PPS/1PPM/1PPH outputs (Jumper configurable)

Serial

Output mode: RS232 or RS422/RS485
 Baud Rate: 1200,2400,4800,9600,19200b/s optional, default value 9600 b/s
 Data bits: 8 Start bits: 1
 Serial port time message format : customizable

NTP/SNTP

2 x NTP/SNTP outputs, 10/100M Ethernet port
 Network Protocols: RFC-1305(NTP v3), RFC-2030(SNTP)
 Time accuracy: 1ms~100ms (Rely on the network environment)

IRIG-B time code (Input, optional as output)

> 8 x IRIG-B AM output ports
 Amplitude 1v~10v (Tunable)
 Fixed Modulation ratio 3:1
 Load 600Ωbalanced output
 Timing accuracy $\leq 25\mu\text{s}$

>8 x IRIG-B DCLS output over RS422 ports Timing accuracy $\leq 1\mu\text{s}$

FRONT PANEL DISPLAY

The distributor has a simple LCD display indicating the time info, setting menu and operation status & 6 LED indicators multiple statuses including:

- *Power status
- *Pulse per second status
- *Time sources, IRIG-B 1 & IRIG-B 2
- *Fail alarm indicating the status of IRIG-B 1 & IRIG-B 2 inputs
- * 4 keypads for the ease control including: " Menu", "▶", " + ", "ENTER"

POWER & ENVIRONMENTAL:

Operating Temperature: -5 °C ~45 °C

Storage Cond.: -30 to +80°C

Humidity: up to 95% non-condensing

Atmospheric Pressure: 70 ~ 106 kPa

Voltage: 220V±15% DC or 220±20%AC

Frequency: 47 to 60 Hz

Power consumption: up to 15 Watts

APPLICATION:

