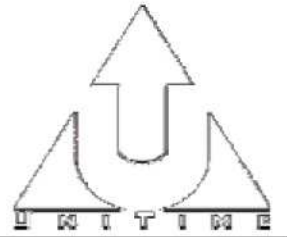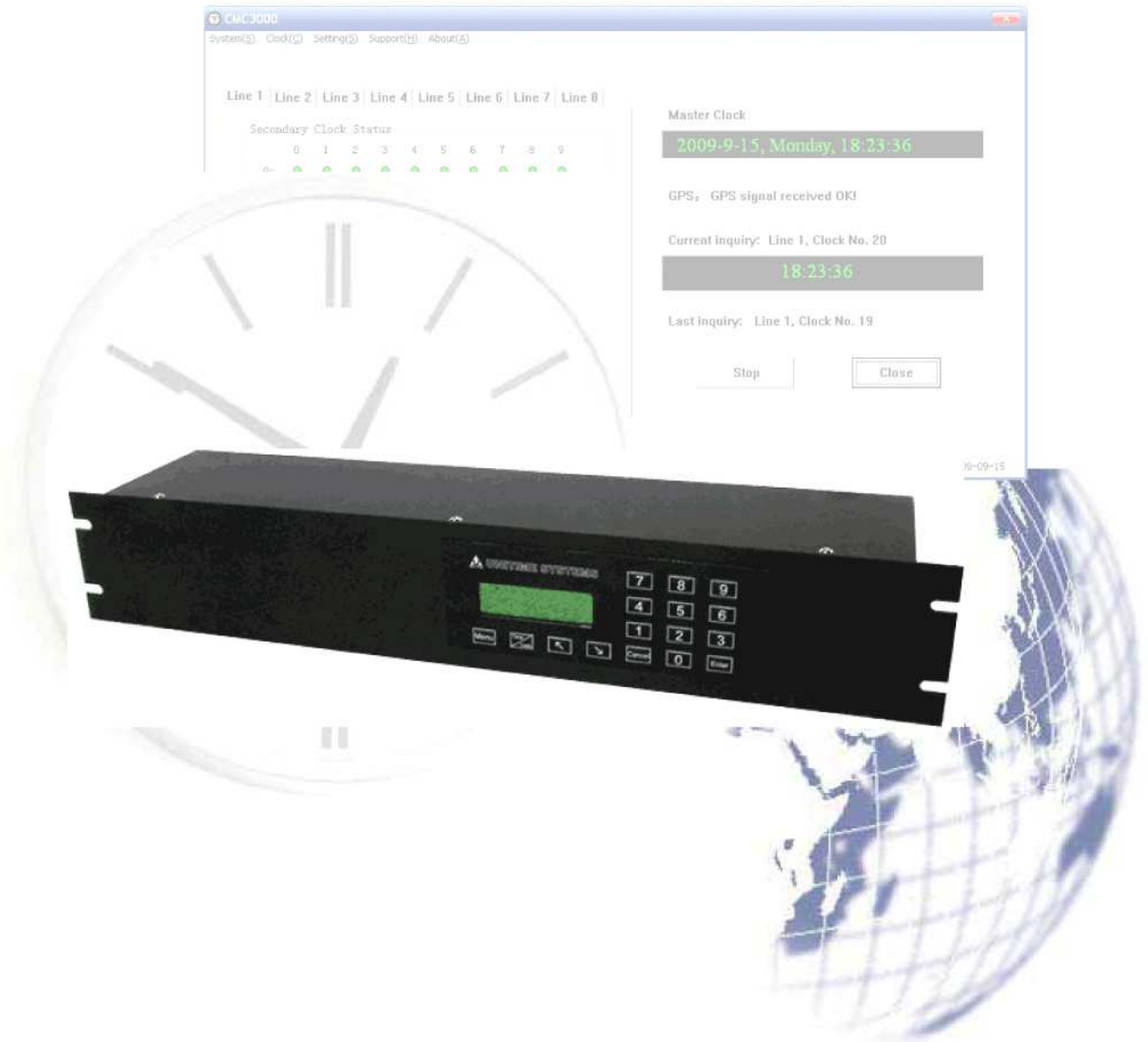# CMC3000R SERIES MASTER CLOCK

For All Clock System

CMC3000R MASTER CLOCK

• High Accuracy Time Reference •

Quartz oscillator of high accuracy is used in CMC3000R, which can provide a time accuracy of 10E-7 under room temperature and works as the time standard supplier for the system when no external time reference available.

• Auto-Switch Over Time References •

CMC3000R master clock automatically analyses external time reference received, and sends out processed identifiable correct time signal to the secondary clocks and equipments via the transmission channels.   When there's lack of complete reception of external time reference, such GPS signal, the master clock will automatically switch over to run on its own quartz time reference without any delay.

• Multiple Independent Channels Output •

CMC3000R master clock is designed with more than one independent transmission channels, in each channel the secondary clocks can be supervised separately.   With multiple transmission channels, the system capacity can be increased up to 800 secondary clocks and the max. wiring length increased to 9.6km.

• Central Supervision on PC Work Station •

With CMC3000R system software, the administrator can watch out the clock system's running status on the PC, and can easily accomplish system setting and clock operations in the control room.   Moreover, the PC for clock system management can work as a NTP time server and synchronize other PCs in the LAN.

• Point-to-point Control •

All secondary equipments, including GPS receiver and all kinds of secondary clocks, can be monitored, supervised or controlled   on CMC3000R master clock separately one by one.   The operation status of each equipment can be checked and displayed on the screen of the master clock.

• Internal Real Time Clock •

A real time clock and backup power are adapted in CMC3000R to guarantee correct time and reservation of system settings during power failure.   No time adjust needed on power recovery.

• Simple Menu Operation •

CMC3000R is operated with easy and simple menu, various operations can be finished with the menu including system setting, or operation to any certain clock or all the clocks.

• Safety Management •

Password will be required to enter system setting on CMC3000R for authorized management.   The user can change the password for proper and safe system management.

• Redundant Configuration Enabled •

Redundant configuration is enabled with CMC3000R master clock for application in important places.   This redundant not only includes double time references, but also includes double control units and double sets of transmission channels.

• Ten Years of Operation Reservation •

The system settings of CMC3000R master clock can be kept for more than 10 years upon a power failure.   No re-set is needed on   power recovery.
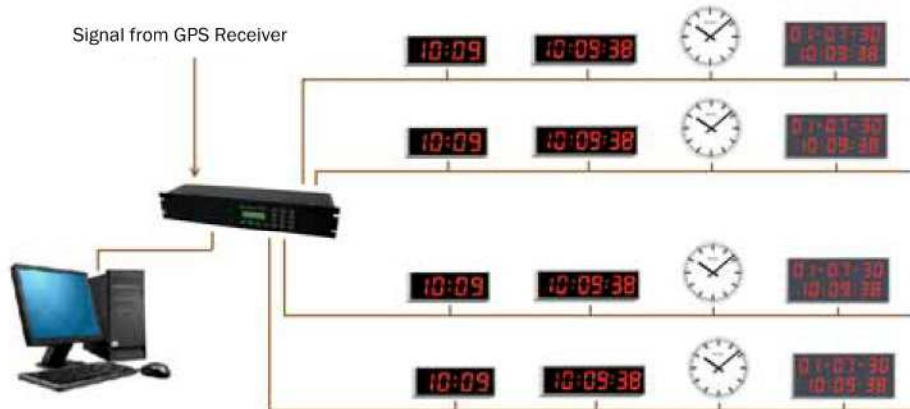
GFClock Yasa Persada, Jakarta

• System Expandable •

With CMC3000R master clock, user can add or deduct the quantity of secondary clocks in each channel, or even re-arrange the channels and clock numbers without replacing any modules or changing any hardware.
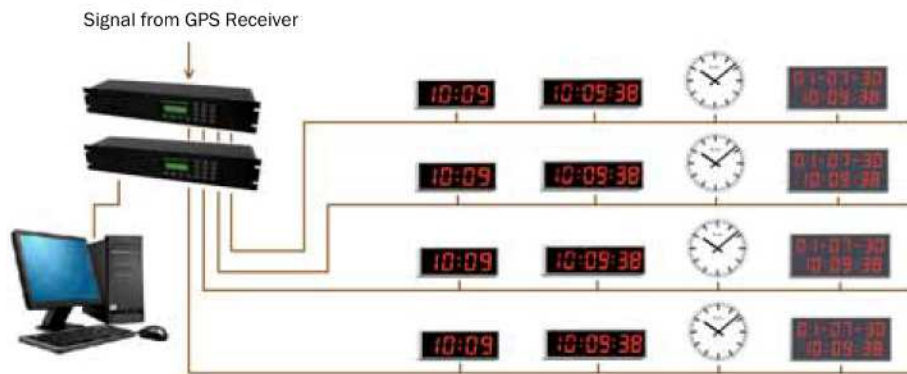
• Main Technical Parameters •

Time Accuracy	Absolute with GPS Signal ≤ 0.1 s/d (at 25°C)
Power Supply	220vac/50Hz
Power Consumption	• •3 w
Working Temp.	-10°C ~ 60°C
Working Humidity	< 95%
Dimension	19" 2U

• System Diagram - CMC3000R •

• System Diagram - CMC3000R - Redundant Configuration •

• Selection Table •

CMC3000R MASTER CLOCK

SPECIFICATION		MAIN PARAMETERS		
Model No.	Model No Suffix	Channels	Capacity	Max. Wiring Length
CMC3000R	2	2	200 secondary clocks	2.4 KM
CMC3000R	4	4	400 secondary clocks	4.8 KM
CMC3000R	6	6	600 secondary clocks	7.2 KM
CMC3000R	8	8	800 secondary clocks	9.6 KM

GFClock Yasa Persada, Jakarta