

These are Synchronized Digital Clocks/Standalone Clocks working on RS-485 Modbus/Wireless Communication Protocol. The slave clocks (up to 120 Nos.) can be connected to the master clock via a 2 core communication cable in multidrop network & the master clock time is synchronized with all the slaves. All the clocks in the synchronized clock network show the exact right time into the seconds. Time is accurately maintained even in the case of power cut. The master clock is a 1" /2"/4" High Super Bright 7 Segment display Panel (Optionally with Wireless or RS-485 Modbus Communication) with 6 displays for Hours, Minutes & seconds. The slave clocks have a 4" high super bright 7 segment red LED Display with exceptional depth & clarity for visibility over a long distance. The slave clocks can be at a maximum distance of upto 1200 mtr (1.2 Km) & yet show accurate synchronized time, same as the master clock. The slaves are also available with Wireless RF Communication as an option.

The clocks are also available in Wireless RF Models wherein the clocks communicate with each other over wireless RF Network. So, no cabling is required between clocks & all the clocks in the network communicate accurate same time wirelessly.

## MASTER CLOCK

UNITECH 6-digit LED Synchronized Master Clock effortlessly put everyone on the same time. These revolutionary clocks display seconds in a smaller height than the hour and minutes so the clocks are highly readable, even from long distances. It can communicate real time data synchronously up to 120-Slave clocks. Master clock operates with highly stable and accurate time, which in turn gives the accurate real time through out the Network.



Display size : 08" / 1" / 2" / 4" led bright display.

External Box : Ex. Flameproof / M S or S S Box

### Functions

- The Master/Slave clocks finds application in processes where time synchronization is required.
- The MASTER clock can be connected to computer on RS232 port which is a serial data transmission.
- The SLAVE clocks are connected to the master on RS485 port which is a parallel data transmission.
- The range available is HOURS: MINUTES: SECONDS or HOURS: MINUTES. The clocks are available in 99 HRS: 99 MINUTES: 99 SECONDS.
- The state of art Micro controller assures time accuracy of 0.01 %.
- The clocks in the network displays the same time simultaneously.
- The maximum slave clocks possible on the network are 120.
- The Time and calendar configuration can be easily adjusted as per the user requirements.
- The user friendly GUI works on Windows XP/2000 platform.
- Master Slave time selection is optional either manual or by PC.
- Display height available is 8"/1"/2"/4 "with red color and time tick LED indication.
- The instrument is designed with two/four relay outputs for process control or ALARMS.
- The power supply given to the device is 230 V/50 Hz AC.

### Salient Features

- Micro Processor Based Master clock.
- Reliable 7-Segment LED display.
- Synchronizes all Slaves Every Second.
- Specially Designed for Clean Room Environment.
- Flicker-free Bright Red 7-Segment LED Display
- User friendly programming Modes.
- The instrument has EMI / RFI filters for harsh electrical environment.
- Time Displays in 12/24 Hrs Format (HH:MM:SS)
- Red filter Transparent overlay facilitates wide viewing angle
- Drives up to 120 Slave Clocks.
- Interface communication: RS-485

### Application :

The following are the main application areas where synchronized digital clocks play an important role.

- Pharmaceutical industries
- Process Industries
- Warehouse
- Mass Production Factories
- Colleges etc

"Sure for service with hi-end **Universal Technology**"

Website: [www.unitechinstrument.com](http://www.unitechinstrument.com)

Sales : +91 9427301436

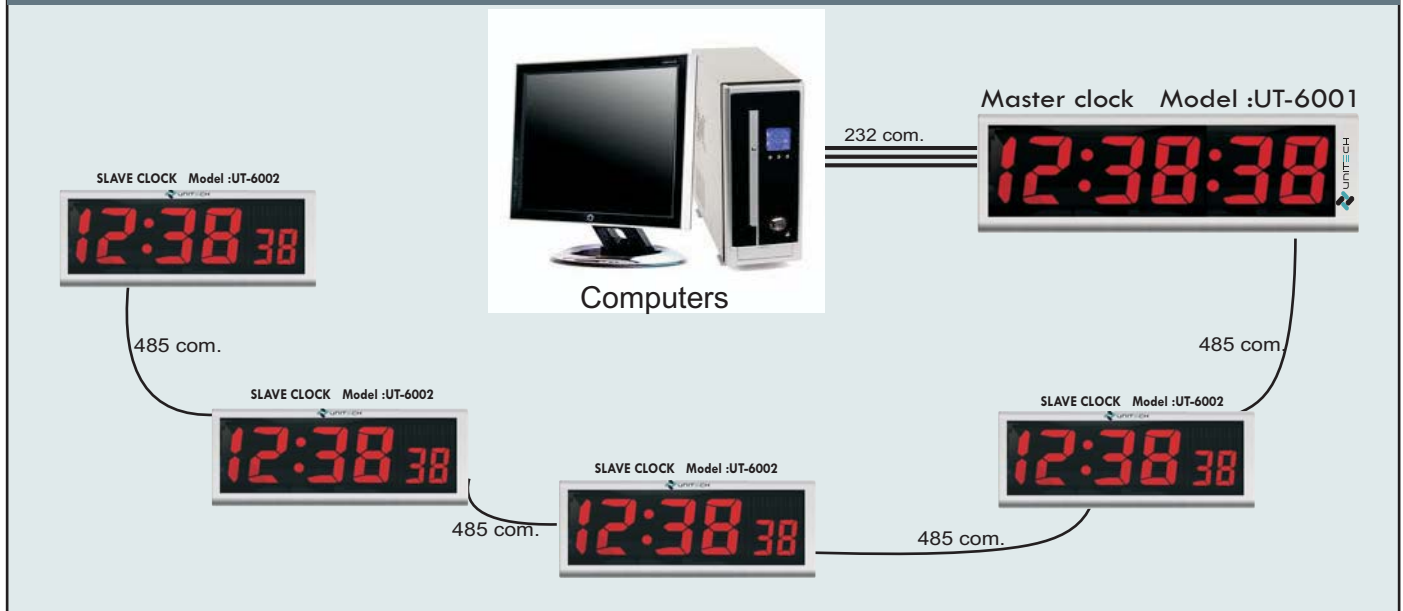
Email : [Sales@unitechinstrument.com](mailto:Sales@unitechinstrument.com)



Features :-

<b>Model No</b>	<b>UT - 1410M</b>
<b>Display</b>	0.8" /1" /2" /4" Seven Segment LED Display (Red) (For Hr, Min & Sec)
	Two 3mm flashing LEDs indicates second
<b>Accuracy</b>	Depends on master clock
<b>Communication</b>	RS-485/232 or Ethernet
<b>Time</b>	Time Master Clock time/Programmable quartz clock with internal battery backup and windows update. (At least three time update in a day with windows server)
<b>Controller</b>	Built in Embedded with industrial performance
<b>Operating voltage</b>	24 V DC or 220 V AC 50 Hz, 10VA
<b>Time Synchronization</b>	Every second
<b>Time Format</b>	12/ 24 hour mode
<b>Power Consumption</b>	25W
<b>Operating temperature:</b>	Operating temperature : 0 - 50°C
<b>Mechanical</b>	Dimensions: very as per display size.
	Weight : 0.5kg (approx.) for 0.8" display size
	Faceplate : Flush mounting SS 304
	Enclosure type : MS Siemens gray powder coated or SS
<b>Mounting</b>	1) Brick wall concealed mounting/wall mounting. 2) Modular wall mounting

Synchronize clock systems topology.



"Sure for service with hi-end Universal Technology"

Website: [www.unitechinstrument.com](http://www.unitechinstrument.com)



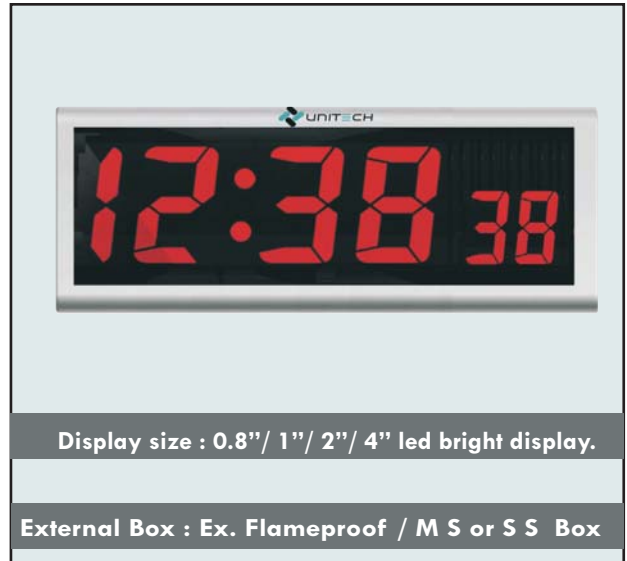
## SLAVE CLOCK

### Description

UNITECH's Digital synchronized Slave clock systems and other LED clocks can display the same, accurate, legal time. UNITECH's commercial digital clocks are specifically designed for applications where precision and reliability are of at most importance. These clocks may be used as accurate stand-alone time displays. They can also be synchronized so that all clocks display the same time. The Master clock synchronizes the Slave clocks every second with the RS-485 communication network.

### Introduction

UNITECH's 6-digit LED Slave Clock Synchronized by Master Clock effortlessly put everyone on the same time. These revolutionary clocks display seconds in a smaller height than the hour and minutes so the clocks are highly readable, even from long distances. It can communicate real time data synchronously up to 120 Slave clocks. Slave clock operates with highly stable and accurate time, which in turn gives the accurate real time through out the Network.



### Features

Model No	UT - 1410S
Display	0.8"/1"2"/4" Seven Segment LED Display (Red) (For Hr, Min and Sec) two 3 mm flashing LEDs indicates second
Accuracy	Depends on master clock
Communication	RS-485
Time	Time synchronized from Master Clock time (At least once time need to be updated by master)
Controller	Built in Embedded with industrial performance
Operating voltage	24 V DC or 220 V AC 50 Hz, 10VA
Time Synchronization	Every second
Time Format	12/24 hour mode
Power Consumption	25W
Operating temperature:	Operating temperature : 0 - 50°C
Mechanical	Dimensions : 110x72x33.5mm for 0.8" display Weight : 0.5kg (approx.) for 0.8" display Faceplate : Flush mounting SS 304 Enclosure type : MS Siemens gray powder coated or SS
Mounting	1) Brick wall concealed mounting/wall mounting. 2) Modular wall mounting

"Sure for service with hi-end **Uni**versal **Techn**ology"

Website: [www.unitechinstrument.com](http://www.unitechinstrument.com)

Sales : +91 9427301436

Email : [Sales@unitechinstrument.com](mailto:Sales@unitechinstrument.com)



Doc. Ref. : K-UT-1410-R1-0612

For Master clock

Ordering Information

UT - 1410M		1	2	3	4	5			
<b>Housing</b>		<b>Display size</b>		<b>Communication</b>		<b>Display colors</b>		<b>Aux power</b>	
Flame proof	F	0.8 Inch	8	RS-485	4	Red	R	230V AC	2
Wall Mount SS	P	1 Inch	1	RS-232	2	Green	G	110V AC	1
Weather proof	W	2 Inch	2	Ethernet	8	Blue	B	24V DC	4
		4 Inch	4						

For Slave clock

Ordering Information

UT - 1410S		1	2	3	4	5			
<b>Housing</b>		<b>Display size</b>		<b>Communication</b>		<b>Display colors</b>		<b>Aux power</b>	
Flame proof	F	0.8 Inch	8	RS-485	4	Red	R	230V AC	2
Wall Mount SS	P	1 Inch	1	Ethernet	8	Green	G	110V AC	1
Weather proof	W	2 Inch	2			Blue	B	24V DC	4
		4 Inch	4						