



2310601038

## Panel Clock Marine PoE, 087645-50, 192x192mm

Slave Clock 192x192 mm, PoE

### Description

- ✓ The clock is equipped with black hour and minute hands
- ✓ The hands are protected by a plain acrylic glass
- ✓ Ethernet/PoE

This Analogue NTP Clock with Power over Ethernet (PoE) connection provides the possibility to create a time distribution system with high accuracy and high reliability.

The NTP Clock is equipped with two motors, 3 hands analogue movement. Initial setting function and error correction is automatic. The movement starts automatically after reception of correct time.

The hour hand is sweeping, minute is stepping.

The NTP clock is equipped with a RJ45 (10/100BASE-T) connector for direct connection to the LAN via a Power-Over-Ethernet switch.

Each clock has a unique IP address. The IP address, gateway, subnetmask etc can be set manually (static IP) using a web browser (or telnet) or it can be set automatically using DHCP (dynamic IP).

The clock normal delivery mode is DHCP (dynamic IP with fallback address 192.168.3.10). Otherwise the IP address is labelled on the clock.

### Technical Dimensions



# Specifications

## GENERAL

Mounting	Console mounting
Housing	Painted aluminium
Backlight	LED
Colour	Black frame, white face, black hands and marks
Dimensions (mm)	192 x 192 x 57 mm (WxHxD)
Connection	Ethernet, PoE
Microcontroller	PIC16F628
Temperature range	0°C to +40°C
Power consumption	2.0 W
Ingress protection	IP20

## GENERAL

To distribute correct time to different users in a Local Area Network (LAN) the Network Time Protocol (NTP) can be used. NTP is a part of the protocol family TCP/IP. The unit that sends out the time is called NTP Server and the clock that receives the time is called NTP Client. There are some different ways (work modes) that can be used for distribution of time according to the NTP standard. The NTP clock supports three different work modes:

1. Unicast client mode (point to point). A unicast client (the NTP clock) sends a request to a designated NTP server at its unicast address and expects a reply from which it can determine the time, the roundtrip delay and local clock offset relative to the server. The IP address of the NTP server is to be entered manually.
2. Same as work mode 1, but the IP address of the NTP server is received automatically from the DHCP server. The clock delivery mode is this option.
3. Broadcast/Multicast mode (point to multipoint). A multicast NTP server periodically sends a unsolicited message to a designated local broadcast address or multicast group address (224.0.1.1) and ordinarily expects no requests from clients. A multicast client (the NTP clock) listens on this address and ordinarily sends no requests

# Used With



### Marine Master Clock 70000

123378-01 Marine Master Clock  
70000

### Marine Master Clock with Network Time Server, 70000L

123378-11 Marine Master Clock  
70000L With Network Time Server