E.A.COMBS LIMITED

TIMING SOLUTIONS

INDOOR CLOCKS
ZAS & ZBS
Brochure 2021

Valid from 15.07.2021

ZAS10-L POE

Model	ZAS10-L PoE
Display format	HH:MM
Digit height	4" / 100 mm
Dimensions	170 x 350 x 44 mm
Power supplied over standard Cat5e cabling	IEEE 802.3af (POE+ compatible) Power over Ethernet standard
Device operations temperature (ambient)	-25°C ÷ 45°C
Casing tightness rating IP	4X

ZBS10-L POE

Model	ZBS10-L PoE
Display format	HH:MM: SS
Digit height	4" / 100 mm
Dimensions	170 x 486 x 44 mm
Power supplied over standard Cat5e cabling	IEEE 802.3af (POE+ compatible) Power over Ethernet standard
Device operations temperature (ambient)	-25°C ÷ 45°C
Casing tightness rating IP	4X

INDOOR CLOCKS, ADVANTAGES

NTP time synchronization

DHCP or Static IP Address

Function CLOCK

Automatic brightness control

Web browser software or IR remote control

Function MASTER Clock

TIME SYNCHRONIZATION, CLOCKS SYSTEMS

Time in the clocks can be set manually by the user or using the function of automatic time synchronisation:

NTP time server client

NTP (Network Time Protocol) – is a communication protocol supporting precise, stable, and safe synchronisation of clocks with any time server through the computer network. A great advantage of this solution is possibility of simultaneous synchronisation of many devices. The synchronisation may be executed:

- from your own local time server – the Internet access is not required
- from a public remote time, server – the Internet access is required

Every clock can be configured as a local NTP time server – as described below.

The advantages of the NTP synchronization:
- provides precise time synchronization with the NTP servers
- possibility of simultaneous synchronization of many clocks from the same server
- operation of five different time servers (1 primary and 4 alternative) provides reliable synchronization.
- changing the time server from the primary to an alternative one is carried out automatically when a failure is detected.

The NTP time synchronization is carried out via the Ethernet (the interface is included in the standard equipment of every clock).

Function of the local NTP time server

Every clock of ZAS/ZBS series may be a central clock (MASTER) which, in the LAN, will provide the time source for other clocks (Slave). In consequence, it is easy to create a clock system in which the central clock can receive time from: a public NTP server or its own internal clock.
Providing synchronized time to all clocks guarantees that everybody uses the same time source. It is extremely important for workplaces, production halls, schools, stations, platforms, etc.

SETTINGS MANAGEMENT – WEB PANEL

Every device has a built-in **WEB PANEL**, which is available through the computer network in the Internet browser. The management through the **WEB PANEL** may be carried out using a computer, a tablet, a smartphone, or another device providing the Internet browser.

The advantages of the solution:

- embedded functionality
- clear and tabular preview of the settings (the website)
- possibility of managing many devices from one place through the computer network
- possibility of remote management through the Internet – from every location in the Word

SETTINGS MANAGEMENT – IR REMOTE CONTROL

To manage the devices, you may use the IR remote control. The remote control is assigned to one or more clocks. It is also possible to assign many remote controls to one clock.

The advantages of this solution:
- operation without a computer
- no need of installing a computer network
- direct verification of the applied changes on the device display

NOTICE:
- IR remote control is an optional accessory. Some functions or settings may be unavailable

DAYLIGHT SAVING TIME / STANDARD TIME - DST

The clock supports the activation of the automatic time change from the standard time to the daylight-saving time and from the daylight-saving time to the standard time (DST – Daylight Saving Time). The change is made for Europe, USA, Canada, Australia, and Israel.

Specifications

MODEL	CONTROLL	DIGIT HEIGHT	WIDTH	HEIGHT	THICKNES	WEIGHT	POWER CONS.
ZAS10-L POE	LAN / Web	100 mm	350 mm	170 mm	44 mm	1.7 kg	3.5W
ZBS10-L POE	LAN / Web	100 mm	486 mm	170 mm	44 mm	2.4 kg	5W

OPTIONS	
IR Remote	You can assign IR remote to the ZAS/ZBS clock.
Holders for hanging	Holders for hanging ZAS / ZBS clocks – single-sided or double-sided. Useful for mounting devices, e.g. to the ceiling.
Perpendicular frame	The frame to mount ZA/ZB clocks – single-sided or double-sided. Useful when the clock is mounted perpendicularly to the wall.

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