



LED digital clocks ECO-M-DK series

Elegant and very slim digital clocks for displaying hours, minutes and date in different languages • temperature display and stopwatch support • aluminum metal housing, powder coated • display composed of SMD LED of high luminance provide for excellent readability from various angles of view • display in red and yellow • autonomous operation with internal quartz powered from mains • NTP synchronization powered over PoE (compatible IEEE 802.3af) or mains powered • slave clock operation controlled by MOBALine, RS485, mains powered • single or double sided clock • wall mounting for single-sided clock • ceiling suspension or wall bracket mounting for double-sided clock • high protection degree IP54 as standard

ECO-M-DK series - properties

The Clock

- display of time values (either 12 or 24 hours time cycle), four digit (HH:MM)
- display of day of week – 3 characters, day of month – 2 digits, month – 3 characters
- display composed of SMD LED, with 75 mm digit height for time and 50 mm digit height for date; viewing distance up to 32 m
- display in red or yellow
- temperature indication (if a temperature sensor is connected) in °C or °F
- possibility of displaying one or two temperatures (two temperature sensors)
- possibility of alternating display between time and temperature, with adjustable period of displaying the corresponding data

Mechanic

- elegant and slim clock frame, square shape, made of aluminium, powder coated in black or silver colour
- front cover made of dark plexiglass for best readability over a wide viewing angle
- single- or double-sided version for wall mounting, ceiling suspension or wall bracket mounting
- double sided version consist of two pieces single sided clock and wall bracket or ceiling suspension
- easy two-step installation and time-saving maintenance, hanging holes for wall mounting
- push buttons, connectors and state LEDs are accessible after dismantling the front plexiglass
- protection degree IP 54
- working temperature - 5 to +55°C

MOBA-NMS software allows configuration, monitoring and management of complete time system from single point in the network.

Stopwatch

- counting upwards from zero, up to 24 hours
- counting downwards from a specified value, with stop at zero, with automatic restart or counting into negative values
- display of intermediate time values, "freezing" of display, cumulated intermediate time
- counting in steps of 1 minute, 1 second or 1/100 seconds
- operation via wired keyboard or remote IR controller
- possibility of parallel switching over into the time/date or temperature display mode

Synchronization

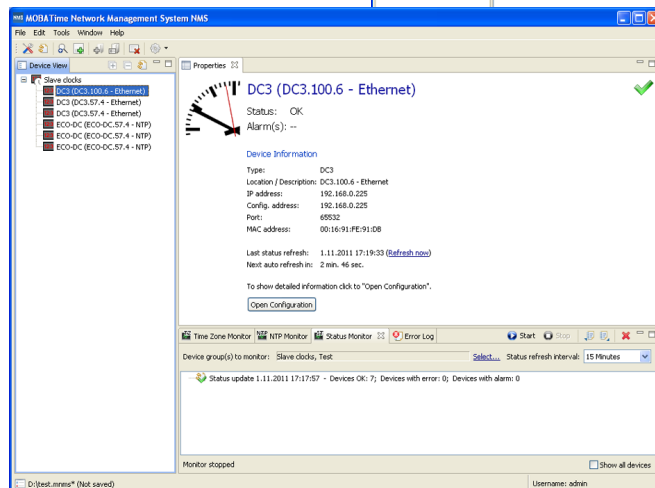
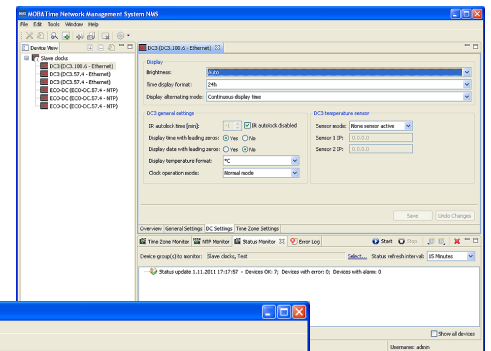
- autonomous operation with internal quartz time base with programmable automatic seasonal time change
- NTP multicast or unicast synchronization powered over PoE or mains powered
- slave clock operation with synchronization by MOBALine or by RS485 (depending on version), mains powered
- accuracy better than +/- 0.1 s when not synchronized (after 24h synchronization at constant temperature)
- RTC backup by means of lithium battery (supercapacitor on request)

Configuration

- setting of the clock parameters and time, date setting by means of internal push buttons or IR remote controller

For NTP and PoE version only:

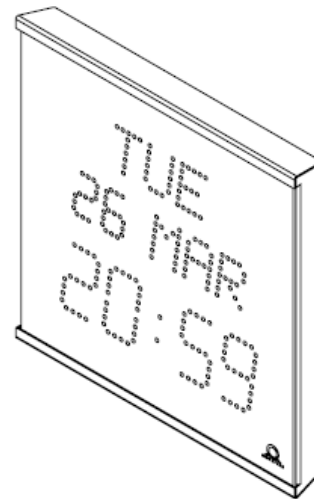
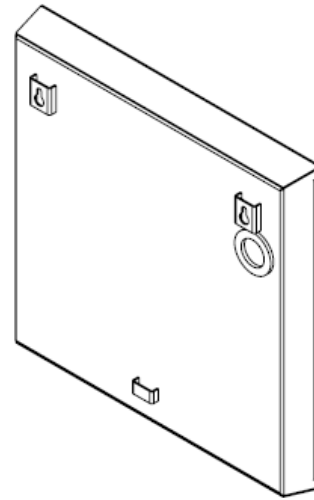
- DHCP / manual configuration of the clock parameters or setting over the telnet
- private options of DHCP string for automatic configuration of all clock parameters when connected to network
- configuration and monitoring using MOBA-NMS software or SNMP
- firmware update remotely through the network using the TFTP protocol
- IPv6 support



Order reference

ECO-M-DK • 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8

1	Height of digits for time	75 mm (digits height of time)	75
2	Number of digits for time	4 digits (HH:MM)	4
3	Display layout	day of week, day of month, month, time	V1
4	Display colour	red yellow	R A
5	Version	single sided double sided	N D
6	Mounting	wall mounting ceiling suspension wall bracket	N S B
7	Synchronization and powering	MOBALine, ActiveDCF, Impulse, mains powered RS485 (IF482 protocol), mains powered NTP protocol, mains powered NTP protocol, PoE powered NTP protocol, PoE powered (power classification support)	STD RS485 NTP PoE PoEclass
8	Option	battery-free RTC backup with supercapacitor	SC



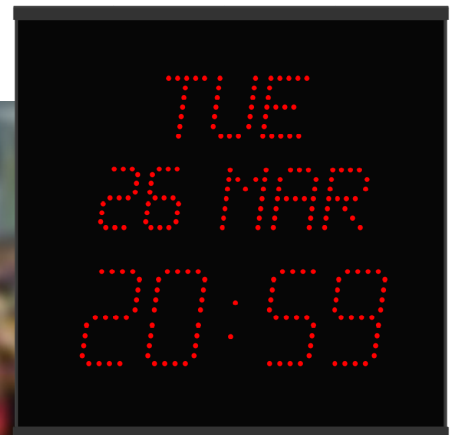
Example:

ECO-M-DK.75.4.V1.A.N.N.STD

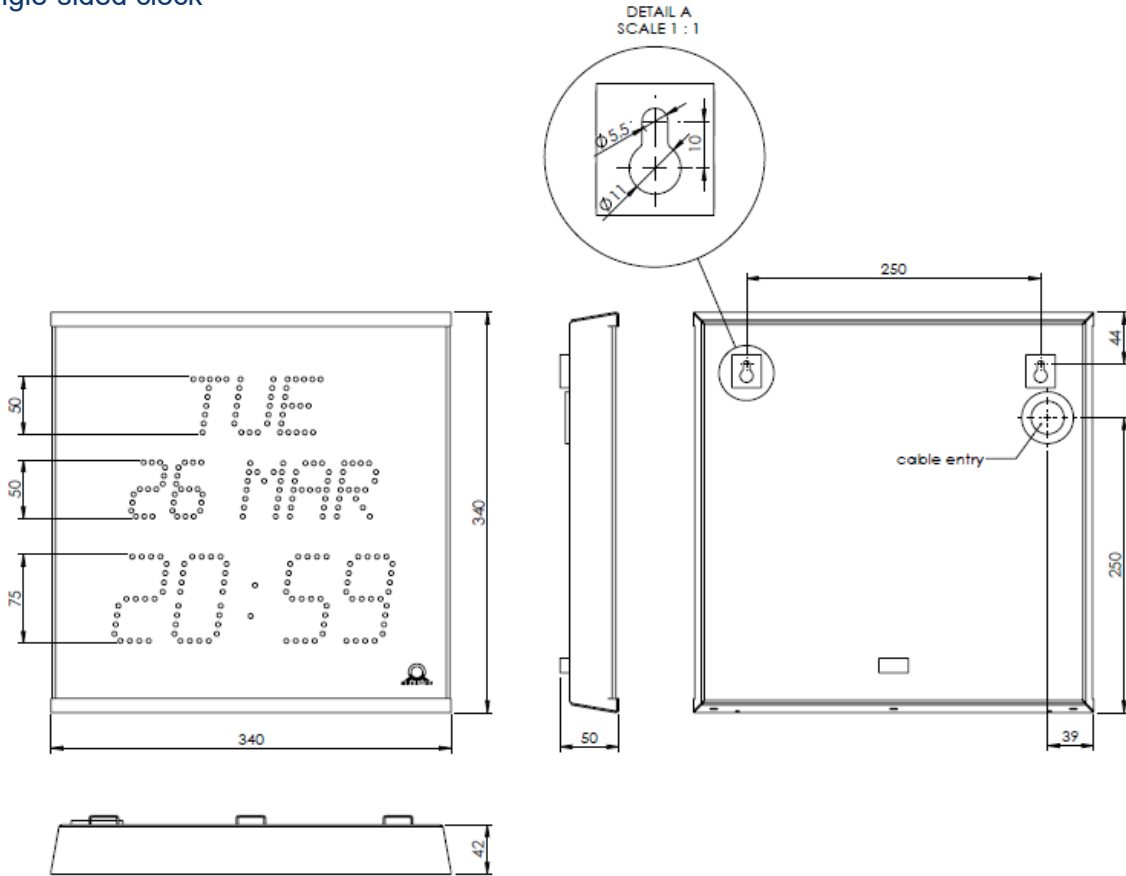
Digital clock, 7segment SMD LED display, 75 mm height of time digits, 4 digits showing hour and minutes (HH:MM), day of week, day of month and month, yellow display colour, single-sided, wall surface mounting, synchronization by MOBALine, mains powered

LED digital Clock ECO-M-DK series

Technical parameters		ECO-M-DK.75
Display	heights of the digits	75/50
	number of digits	4/date
Time display (12 or 24 format)	HH : MM	✓
Date display	day of week	2 or 3 characters
	day of month	2 digits
	month	3 characters
	supported languages	Czech, Slovak, English, German, French, Italian, Russian, Spanish, Portuguese, Polish
Powering	100 - 240 VAC	✓
	PoE / PoEclass (IEEE 802.3af)	✓
Max. power consumption [VA]	single sided	7
	double sided	11
Quartz base	running reserve (time+date)	1 year with lithium battery / 12 hours with supercapacitor
	accuracy	+/- 0.1 s/day without synchronization (after 24h synchronization at constant temp.)
Accuracy of temperature measurement	range -25 to +85 °C	±0,5 °C
	range -50 to +125 °C	±2,0 °C
Operating conditions	temperature	-5 to +55 °C
	humidity	0 to 95% (without condensation)
	protection degree	IP 54
Weight [kg]	single-sided	0.9
	double-sided	2
Dimensions [mm] (w x h x d)	single-sided	340 x 340 x 42
	double-sided	340 x 340 x 115



Single-sided clock



Double-sided clock

