



Keenly priced LED digital clocks ECO-DC series

The ECO-DC series economical price elegant and very slim digital clocks in seven segment LED technique for displaying time and date • digit height 57 or 100 mm • autonomous operation with internal quartz powered from mains • NTP multicast or unicast synchronization powered over PoE (compatible IEEE 802.3af) or mains powered • slave clock operation controlled by self-setting MOBALine code or by IRIG-B, mains powered • LED display in red, green, pure green, blue, yellow or white colour • single or double sided clock • plastic case in black colour • wall mounting for single sided clock • ceiling suspension or wall bracket mounting for double sided clock • intended to be used indoors • IP 30

ECO-DC series - variants



- time display in four digits (HH:MM) or in six digits (HH:MM:SS or HH:MM^{SS}) either 12 or 24 hours format
- AM/PM indication for 12 hours format
- date display in four digits (DD.MM.) or in six digits (DD.MM.YY or DD.MM^{YY})
- 7 segment LED displays with 57 or 100 mm digit height for a viewing distance up to 25 or 40 m
- alternating display of time and date
- display available in the red, green, pure green, blue, yellow or white colour
- models 57x and 100x are available only with red display
- sensor controlled automatic or manual adjustment of the display brightness

Mechanic

- anti-reflection front cover made of plexiglass including a filter layer for best readability over a wide viewing angle
- elegant and slim clock frame, made of ABS plastic in black colour
- 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 installation and time-saving maintenance, hanging holes for wall mounting supporting element for distance from wall (can be removed to tilt the clock down)
- connectors and state LEDs are accessible on the back side in the recess
- push-buttons placed on the back side in the recess
- protection degree IP30 (IP40 on request)
- equipment protection class II (no PE connection, plastic case)
- working temperature - 5 to +55°C

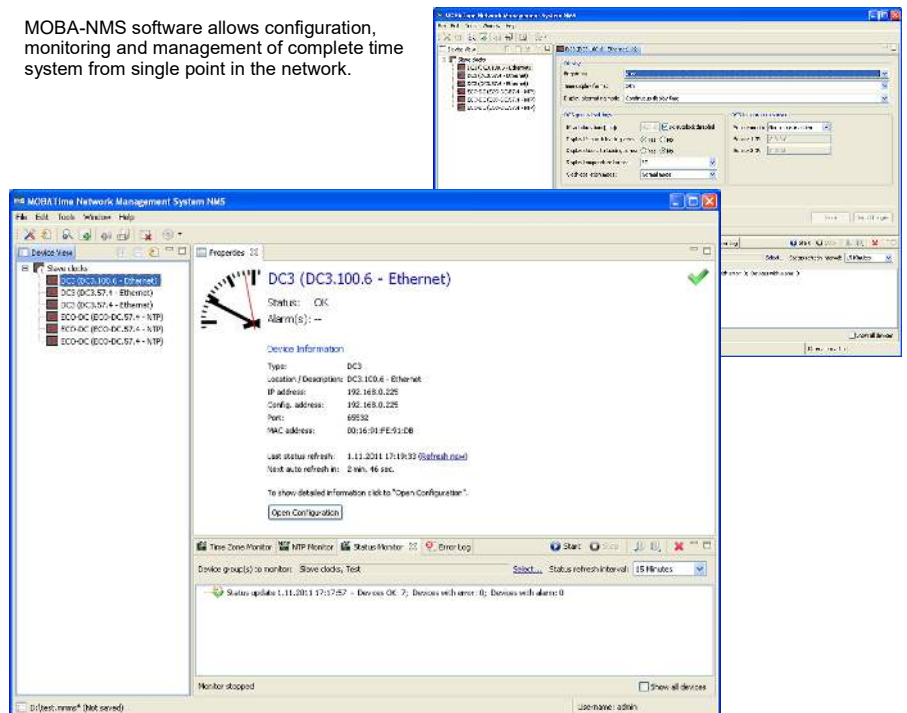
Synchronization

- 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 self-setting MOBALine code or by IRIG-B, mains powered
- precision 0.3 s/day at constant temperature – software trimming
- NTP and PoE version IPv6 ready
- RTC backup by means of super-capacitor

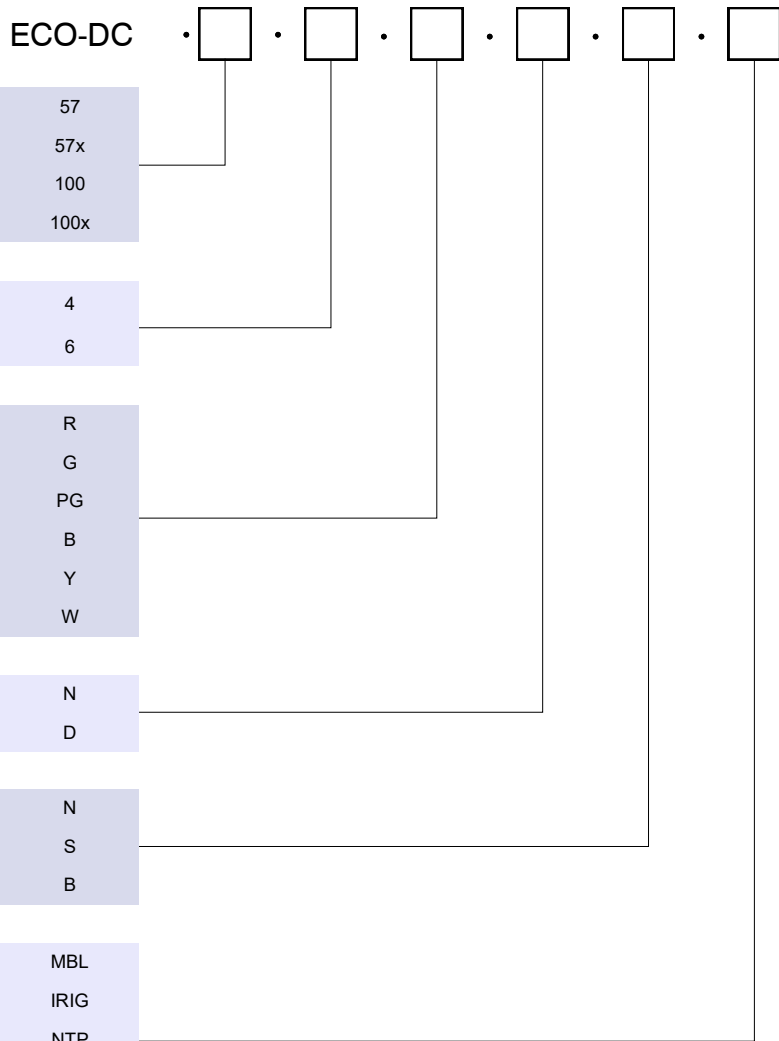
Configuration

- setting of the clock parameters and time, date setting by means of push buttons
- 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 MOBA-NMS (TFTP protocol)
 - powered from mains with wide input voltage range 100-240VAC, optionally from 24 VDC voltage or through PoE (IEEE 802.3af) on PoE version

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



Order reference ECO-DC



Digit height

57 mm (height of first 4 digits)	57
57 mm (height of all 6 digits)	57x
100 mm (height of first 4 digits)	100
100 mm (height of all 6 digits)	100x

Number of digits

4 digits (HH:MM)	4
6 digits (HH:MM:SS or HH:MM ^{SS})	6

Display colour

red	R
green	G
pure green	PG
blue	B
yellow	Y
white	W

Version

single sided	N
double sided	D

Mounting

wall mounting	N
ceiling suspension	S
wall bracket	B

Synchronization

MOBALine, mains powered	MBL
IRIG-B, mains powered	IRIG
NTP protocol, mains powered	NTP
NTP protocol, PoE powered	PoE
mains powered, synchronized by MOBALine or Active DCF	MBLDCF

Option

powered by 24 VDC (not for PoE version)	VDC
display composed of SMD LED	SL



Note:

Models ECO-DC.57x and ECO-DC.100x are available only with red display

Example:

ECO-DC.100.4.R.N.N.MBL

Digital clock 7-segment display 100 mm height, 4 digits showing hour and minute (HH:MM) respectively day and month (DD.MM.), red colour, single-sided, wall surface mounting, synchronization by MOBALine, mains powered

Connections



Version NTP synchronized, mains powered



Version NTP, PoE (Power over Ethernet) powered

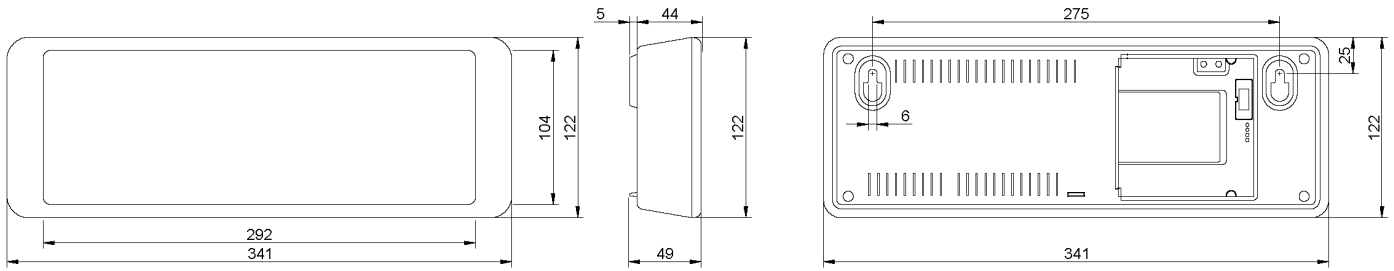


Version MOBALine or IRIG-B synchronized, mains powered

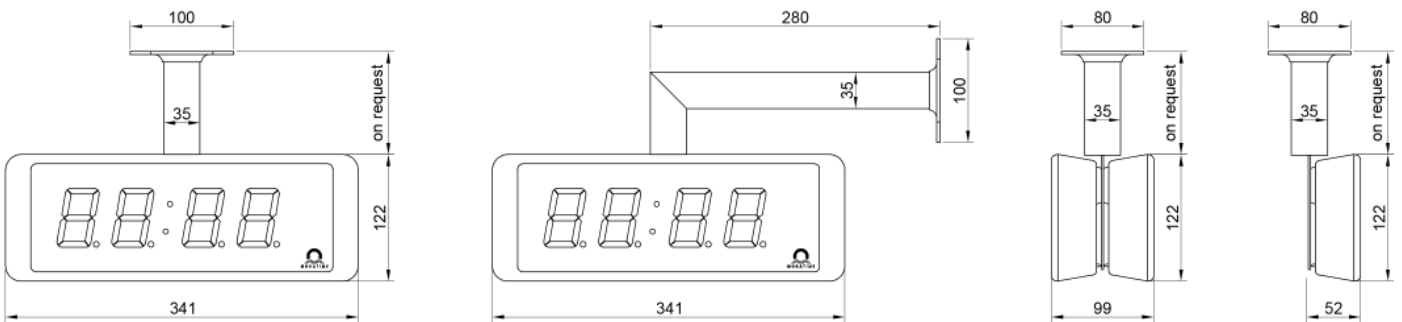
Economy – price LED digital Clock **ECO-DC** series

Technical data	ECO-DC	57.4	57.6	57x.6	100.4	100.6	100x.6
Display	Digit height	57	57 / 38	57	100	100 / 57	100
	Number of digits	4	4 + 2	6	4	4 + 2	6
Time display	HH : MM	✓			✓		
	HH : MM ^{SS}		✓			✓	
	HH : MM : SS			✓			✓
Date display	DD. MM	✓			✓		
	DD. MM. ^{YY}		✓			✓	
	DD.MM.YY			✓			✓
Automatic or manual display brightness				✓			
Viewing distance			25 m			40 m	
Autonomous operation			Internal quartz base				
Synchronisation	MBL	MOBALine time code, mains powered					
	IRIG	IRIG-B, mains powered					
	NTP	NTP protocol, mains powered					
	PoE	NTP protocol powered over PoE (compatible IEEE 802.3af)					
	MBLDCF	mains powered, synchronized by MOBALine or Active DCF					
Power supply		100 - 240 VAC / 50 - 60 Hz					
		24 VDC (option, not for PoE version)					
Power consumption AC/DC version	single sided	7 VA	8 VA	8 VA	7 VA	8 VA	10 VA
	double sided	11 VA	16 VA	16 VA	11 VA	16 VA	18 VA
Power consumption PoE version	single sided	7 VA	8 VA	8 VA	7 VA	8 VA	10 VA
	double sided	11 VA	15 VA	15 VA	11 VA	15 VA	15 VA
Quartz accuracy at 20 °C		± 0.3 seconds / day					
Operating temperature		- 5 to + 55 °C					
Protection degree		IP 30 (IP 40 on request)					
Weight [kg]	single sided	0,75	1,15	1,25	1,8	1,9	2
	double sided	2	2,8	3	4,1	4,3	4,5
Dimension [mm]	single sided	341 x 122 x 49			580 x 180 x 58		
	double sided	341 x 122 x 99			580 x 180 x 120		

DC.57 single sided clock dimension

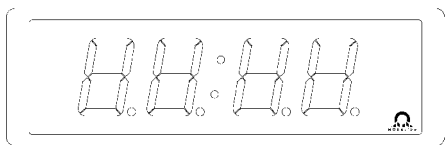


DC.57 double sided clock dimension and mounting

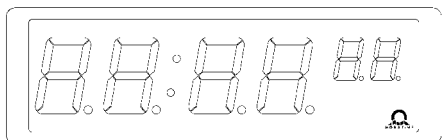


Note: specify suspension rod length - 5, 10, 30, 50 cm or custom length on request in order

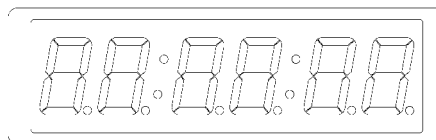
Display layout



ECO-DC.57.4

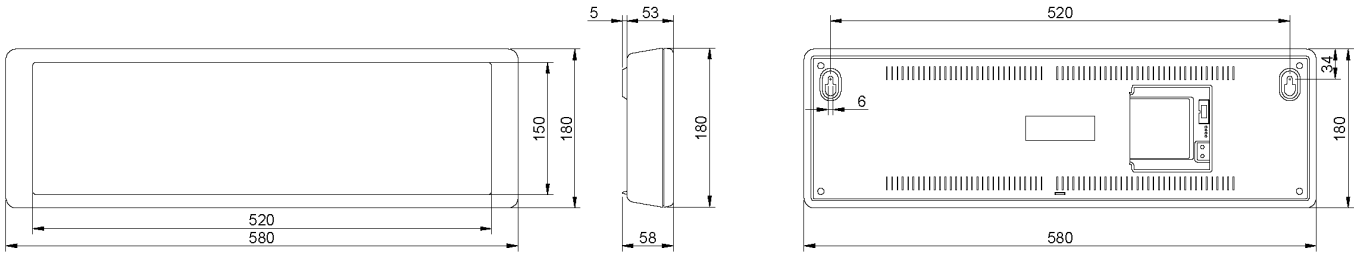


ECO-DC.57.6

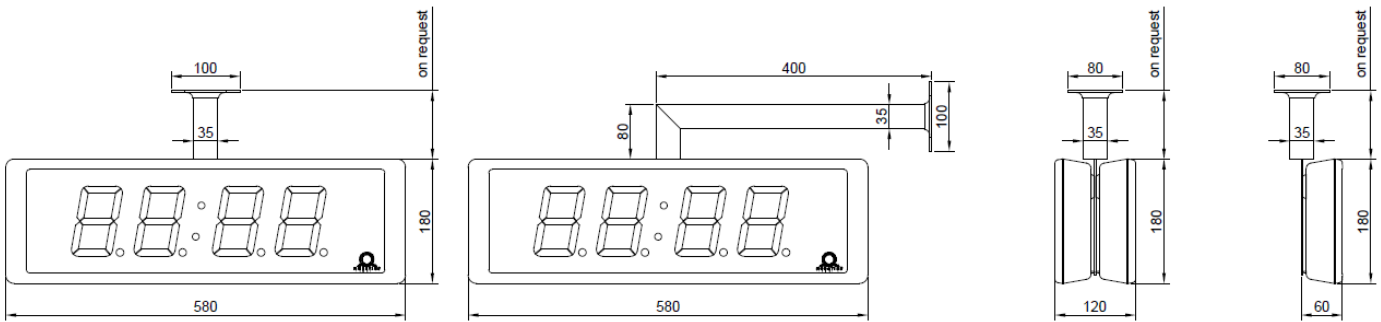


ECO-DC.57x.6

DC.100 single sided clock dimension

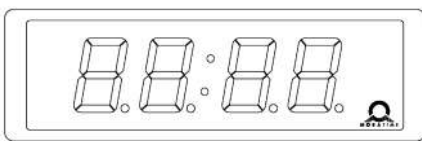


DC.100 double sided clock dimension and mounting

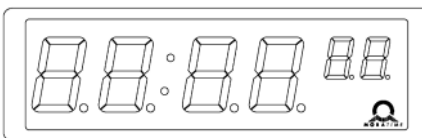


Note: specify suspension rod length - 5, 10, 30, 50 cm or custom length on request in order

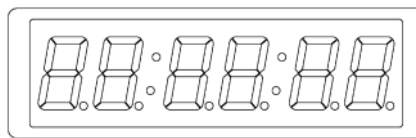
Display layout



ECO-DC.100.4



ECO-DC.100.6



ECO-DC.100x.6