

Multi-purpose LED-digital clocks for outdoor use IP65

Mod.-line DCS

This type of multi-purpose digital clock, intended to be used in the outdoors, features versatile combinations of the height and the number of digits. The clock meets the requirements of the majority of conventional applications.

7 – segment display of high luminance LED for excellent readability up to 200 m distance from various angles of view even on direct sunshine.

The following features completes the range of this outdoor digital clocks:

- Available in red, green, yellow and blue
- Aluminium housing, powder coated in black RAL 9005
- Wall mounting, ceiling suspension or wall bracket mounting.

Options:

- External sensors for temperature display
- Auxiliary interface for RS 232, RS 485 and IRIG-B
- Built-in Ethernet LAN interface
- External buttons for stopwatch
- Infrared remote control for easy access to all functions, for configuration as well as for the stopwatch function.



The clock

- display of time values (either 12 or 24 hours time cycle)
- four-digit (HH:MM) or six-digit (HH:MM:SS) format
- display of calendar date in four or six digit format (including the year)
- display of temperature in °C or °F. Up to two sensors connectable
- alternating display of time, date and temperature, with adjustable time period for the displaying of the corresponding figures
- possibility of setting up the time zone

Stop watch

- counting upwards, from zero, up to 24 hours
- counting downwards from a specified value, with stop at zero, automatic restart or counting into minus values
- display of intermediate time value, "freezing" of display, cumulated intermediate time
- counting in steps of 1 minute, 1 second or 1/100
- manual or automatic adjustment of the luminosity of LED displays
- front side glass with dark filter for improved readability
- single-sided design for wall mounting, single- and double-sided design with wall mounting bracket (side console) or ceiling suspension
- clock frame made by aluminium profiles with powder coated in RAL 9005 colour (black) as standard, any other RAL colour on request
- adjustment of clock parameters using two pushbuttons inside of the clock (behind the cover) or through remote controller
- autonomous, quartz controlled time base, with the possibility of synchronization using the following: DCF 77 radio signal, one-minute 24 V pulses, the MOBATIME serial code, MOBALine, RS 232, RS 485, IRIG-B or GPS
- possibility of connection of unlimited number of digital clocks to one DCF 77 radio signal receiver, in series
- protection degree IP 65

seconds

- operation via keyboard or remote IR controller
- possibility to connect another display unit
- possibility of parallel switching over into the time / date or temperature display mode

Basic properties

- digit height of 100 to 500 mm, which corresponds to readability distance of 40 up to 200 m
- digits in red, blue, yellow and pure green colour

Accessories

- GPS or DCF 77 radio signal receiver
- temperature sensors of IP 66 protection degree
- remote IR controller for clock set up and stop watch control

On request

- Internal relay, triggered when the stopwatch (in countdown mode) reaches zero

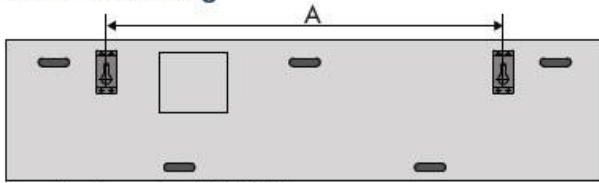
Type designation of the DCS series digital clock

DSC	.	1	.	2	.	3	.	4	.	5	.	6
Digit height ("x" after height only for 6 digit version)												1
100 mm											100 (x)	
180 mm											180 (x)	
250 mm											250 (x)	
320 mm											320 (x)	
500 mm											500 (x)	
Number of digits												2
four digits (HH:MM)											4	
six digits (HH:MM:SS)											6	
Display colour												3
red											R	
pure green											PG	
Clock design												4
single-side design											N	
double-side design											D	
Mode of assembly												5
Wall mounting (for single-sided clocks only)											N	
Ceiling suspension (specify length with order: 10, 30, 50 cm or on request)											S	
Wall mounting bracket (side console)											B	
Options												6
Built-in RS 232, RS 485, IRIG-B interface											SI	
Built-in Ethernet interface for synchronization from a Multicast NTP time server											LAN	
Frame color on request (black, RAL 9005 as standard)											RALxxxx	
Accessories												
Temperature sensor, IP 66, with 3 m cable											DC.TP	
Temperature sensor, IP 66, with 30 m cable											DC.TP30	
Temperature sensor, without cable (max. 1200 m), 12 VDC powered											DC.RS485	
keyboard for stopwatch control, cable 5m											DC.SK	
remote IR controller											IR	
internal relay (for stopwatch use)											REL	
DCF 77 radio receiver											DCF 4500	
GPS 4500 satellite receiver											GPS 4500	

Technical Data		DSC.100.4		DSC.100x.6		DSC.180.4		DSC.180x.6		DCS.250.4		DCS.250x.6		DCS.320.4		DCS.320x.6		DCS.500.4		DCS.500x.6		
Display	Digit Height (mm)	100		100		180		180		250		250		320		320		500		500		
	Number of Digits	4		6		4		6		4		6		4		6		4		6		
Time display (12 or 24 h format)	HH:MM	✓				✓				✓				✓				✓				
	HH:MM:SS			✓				✓				✓				✓				✓		
Date display	DD.MM	✓				✓				✓				✓				✓				
	DD.MM.YY			✓				✓				✓				✓				✓		
Reading distance up to		40 m		40 m		70 m		70 m		100 m		100 m		130 m		130 m		200 m		200 m		
Power supply	AC standard	100 - 240 VAC, 50 - 60 Hz																				
	DC on request	12 / 24 VDC ± 20 %																				
Power consumption (red)	single - sided	10 VA		15 VA		15 VA		23 VA		26 VA		39 VA		33 VA		49 VA		33 VA		49 VA		
	double - sided	21 VA		31 VA		31 VA		47 VA		39 VA		58 VA		48 VA		72 VA		48 VA		72 VA		
Power consumption (pure green)	single - sided	15 VA		23 VA		23 VA		35 VA		53 VA		79 VA		66 VA		99 VA		66 VA		99 VA		
	double - sided	31 VA		50 VA		50 VA		70 VA		78 VA		117 VA		96 VA		144 VA		96 VA		144 VA		
Quartz accuracy at 20°C	without synchronization	± 0.1 s/day																				
Temperature accuracy	- 55 to - 10 °C	± 2 °C																				
	- 10 to + 85 °C	± 0.5 °C																				
	+ 85 to + 99.5 °C	± 2 °C																				
Operating temperature		-25 to +60°C, (0 to 95% relative humidity non condensing)																				
Range of measured temp.		- 55 to + 99.9 °C																				
Protection degree		IP 65																				
Approx. Weight (kg)	single - sided	5,5		8		14		20		45		60		65		85		90		120		
	double - sided	12		17		30		43		100		130		140		180		200		260		
Dimensions L: Length H: Height T: Thickness in mm	single - sided	L	530		750		940		1330		1250		1780		1410		2090		2200		3250	
		H	191		191		290		290		350		350		410		410		640		640	
		T	60		60		60		60		60		60		60		60		60		60	
in mm	double - sided	L	530		750		940		1330		1250		1780		1410		2090		2200		3250	
		H	191		191		290		290		350		350		410		410		640		640	
		T	160		160		160		160		160		160		160		160		160		160	
Accessories																						
IR remote control unit		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		
DCF 4500 receiver		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		
GPS 4500 receiver		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		
External temperature sensors of IP 66 protection degree		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		
Keyboard for stopwatch control, cable 5 m		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		
Internal relay		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		

Assembly and mounting

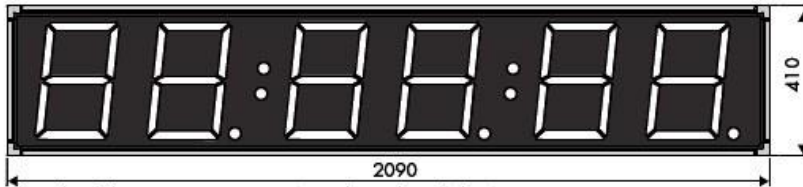
Wall mounting



Example of rear view: DSC 180.6

Type of clock	A (mm)
DSC.100.4	424
DSC.100.6	644
DSC.180.4	484
DSC.180.6	800

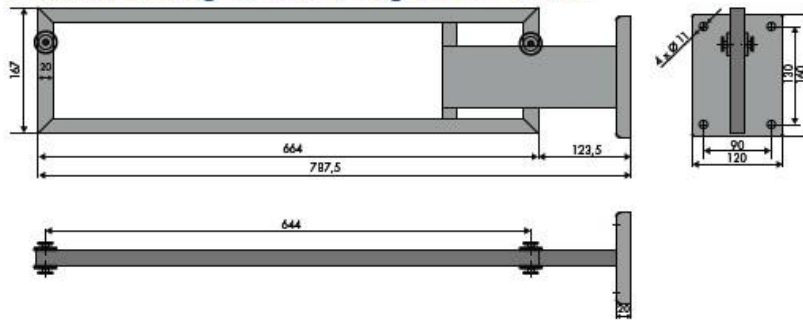
For larger dimensions the mounting of the clocks can be provided individually to customer requirements



Example of dimensions: DSC 320 (see also technical data)



Wall mounting bracket, e.g. DSC 100.6



Ceiling suspension mounting for double-sided DSC clock, e.g. DSC 100.6

