

### **DIGITAL INDOOR CLOCK**

# **DC 20**

The DC 20 special digital clock line offers a 19" model for server racks as well as a panel model for use in ships, traffic control centers, power plants, radio and TV stations...



# **FEATURES**

### **DISPLAY**

- continuous display of time, date, temperature or stopwatch
- alternating display of time, date, calendar week, temperature, humidity, and atmospheric pressure, with customizable intervals from 0-60 seconds for each display
- manual or sensor-controlled automatic display brightness adjustment
- · wide viewing angle (160°)

#### Time

- · 12/24 hour cycle
- · with or without leading zero
- · AM/PM indication for 12 hour cycle

#### **Date**

with or without leading zero

### **Temperature**

• in °C or °F

### **HOUSING**

- clock frame made of anodized aluminium profiles in black or silver, any RAL color on request
- anti-reflection front cover made of plexiglass, including a filter layer for optimal readability
- push buttons on the front (DC.20.12) or back (DC.20.6) of the housing

### **STOPWATCH**

- · counting up from zero, up to 24 hours
- counting down from a predefined time value, with stop at zero, automatic restart from predefined time or counting into negative values
- · display of intermediate time values, display "freeze"
- · counting in steps of 1 day, 1 minute, 1 second
- or 1/100 seconds
- possibility to connect another display unit
- possibility of parallel switching over into the time and date or temperature display mode

### CONFIGURATION

 setting of the clock parameters, as well as time, date, and stopwatch control by means of push buttons or IR remote controller; stopwatch can additionally be controlled via big red button

### **SYNCHRONIZATION**

- · autonomous operation with internal quartz base
- accuracy ±0.1 s/day at constant temperature software trimming
- · possibility to configure any time zone
- NTP multicast or unicast synchronization, powered over Ethernet (PoE) or mains
- · MOBALine, impulse line, DCF or IRIG-B, mains powered
- RTC backup by means of supercapacitor (lithium battery on request)

### **NETWORK**

- · IPv4 and IPv6 support
- DHCPv4, DHCPv6 / manual configuration of the clock parameters or configuration via web interface
- DHCPv4, DHCPv6 private strings allow easy configuration of clock parameters when connected to LAN

# **ORDER KEY**

### 1 FORMAT

Digit height	10:08 25	10:08:25	Reading distance
20 mm (front panel version)	20.6	-	6-8 m
20 mm (rack version)	-	20x.12	6-8 m

### 2 DISPLAY COLOR





**R** red **G** green

## 3 INSTALLATION



#### PANEL MOUNTING

N.F (einseitig)



### **RACK MOUNTING**

N.R (einseitig)

### **4 SYNCHRONIZATION**

CODE	SYNCHRONIZATION	POWER SUPPLY
NTP	NTP	Mains
PoE	NTP	PoE
WiFi	WiFi (2.4 GHz), NTP	Mains
<b>WiFi5</b> WiFi (2.4/5.0 GHz), NTP		Mains
LGC	MOBALine / DCF / IRIG-B / (un)polarized 24 VDC pulses	Mains

### **5 HOUSING COLOR**







black

silver

RALxxxx on request

# 6 OPTIONS

CODE	OPTION	
RS485	RS-485 interface	
VDC	Power supply via 18–56 VDC	
BAT	Lithium battery	
RP	RP Redundant power supply (PoE + 24 VDC)	

### 7 ACCESSORIES

CODE	OPTION	
IR	infrared remote control	
AD 650	DCF77 radio signal receiver	
GNSS 4500	GNSS receiver including antenna	
SK	keyboard for stopwatch control, 5m cable	
SKH	KH stainless steel keyboard for clock and stopwatch control, 5m cable, handheld	
SKF	stainless steel keyboard for clock and stopwatch control, flush mounting	
SKW	stainless steel keyboard for clock and stopwatch control, wall mounting	
TP 3m	temperature sensor, IP 66, 3m cable	
TP 30m	temperature sensor, IP 66, 30m cable	
TPH 1m	temperature and humidity sensor, IP 66, 1m cable	
BRB10	big red button for stopwatch control	
СВ	Code Blue signal receiver, AC/DC input range 7–350 V	

# **TECHNICAL DATA**

DC		20.6	20x.12	
Digit height (mm)		20/14	20	
Display features		Time display in 12-hour or 24-hour format  Alternating display of time, date, temperature¹ (in C° or F°), air pressure¹ and humidity¹  Automatic or manual display brightness adjustment  Stopwatch (count up to 24 hours, countdown from set value, display of time intervals, freezing of display)  Stopwatch operation via push buttons, IR remote control		
Material		Housing: aluminum Cover glass: anti-reflective plexiglass		
Power supply		Standard: 100 – 240 VAC, 50 – 60 Hz² VDC (on request): 18 – 56 VDC (18 – 40 VAC) VDC 12V (on request): 12 – 16 VDC		
		PoE version: PoE (IEEE 802.3af class 0) PoEclass version: PoE (IEEE 802.3af class 3)		
Power consumption (VA)	Mains	3	5	
	PoE	3	5	
Quartz accuracy at 20 °C		±0.1 sec/day without synchronization (after 24 hours of synchronization at constant temperature)		
RTC backup/ quartz-based time mainte- nance	Mains power supply	from lithium battery: > 2 years (without power supply) / > 15 years (with power supply)		
	PoE power supply	no time maintenance		
Operating conditions		-5 to +55 °C (0 to 95% relative humidity, non-condensing)		
Degree of protection		IP 40		
Standards		2002/96/EC / 2011/65/EU / 2014/30/EU / 2014/35/EU / EN 50121-4 / EN 55022 / EN 55024 / EN 60950-1		
Weight (kg)		1.4	1.8	

 $<sup>^{\</sup>mathrm{1}}$  only with external temperature sensor  $^{\mathrm{2}}$  DC.20.6: with external AC/DC adapter

