

DATASHEET		
<b>Product Name</b>	Digital LED Wall Clock	
Type / Model	NDC 100/6 THS R L20 12DC USB	
Order Code	ZZ0933-3.00	Date of last revision: 26.01.2022



### **Product Description**

The **NDC 100/6 THS R L20 12DC USB** is a large size digital LED clock, which can display time, date, temperature and humidity information. Its aesthetic design and high brightness LED display with large viewing angle makes it suitable for use in modern interior environments such as offices, banks, public institutions, bus and railways stations, airports, manufacturing plants, production lines, warehouses, etc. All displaying parameters (e.g. time, date, duration of each information, brightness, etc.) can be set with the remote control or PC software application via USB connection.

Clock installation is simple, wall mounting bracket, power supply adapter and installation guide are included.

Various optional accessories are available, please see the list and brief description below.

#### **Main Features**

- Displaying TIME, DATE, TEMPERATURE and RELATIVE HUMIDITY;
- Displaying format: HH:MM:SS (hours: minutes: seconds) and DD:MM:YY (day: month: year);
   XX,X °C (temperature in °C) and XX rH (relative humidity in %RH);
- 100 mm (4") digit height, up to 40 m readability;
- High-brightness LEDs with large viewing angle 120°;
- Alternating of each information and its duration can be set from 0 to 99 sec;
- Automatic or manual LED brightness control (built-in light sensor);
- Stylish frame made of anodized aluminum profile;
- Tinted acrylic glass with non-glare surface;
- Wireless setup using IR remote control;
- USB interface for PC connection and setup using NDC\_config sw application;
- Can be set as Count-up or Count-down timer/counter (with optional trigger input and Relay switch output);
- Built-in time scheduler for triggering alarm events, e.g. time breaks, work shifts (with optional Relay output).

### **Optional Accessories** - can be ordered separately as required

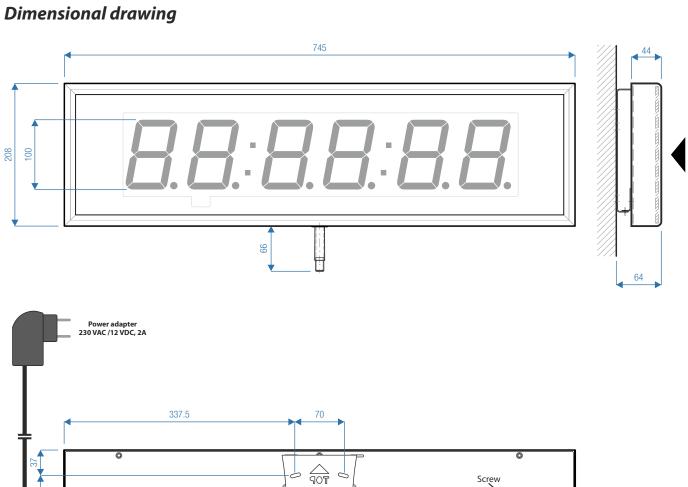
- Remote control IR:
  - At least 1 pc. is necessary to be purchased with clock.
  - In case of purchasing more clocks, only one remote control is needed.
- Temperature and humidity sensor:
  - Internal (plug-in probe): THS Sensor 40 3,3DC I2C
  - Already included with NDC...THS clock version delivery (replaceble item)
- Relay voltage-free contact switch
  - Can be used for triggering external device (e.g. acoustic or light alarm)
- Counter / timer input
  - Used for triggering counter or timer events (e.g. count-down, count-up)
- GPS interface and GPS receiver
  - Used for time synchronization with GPS satelite

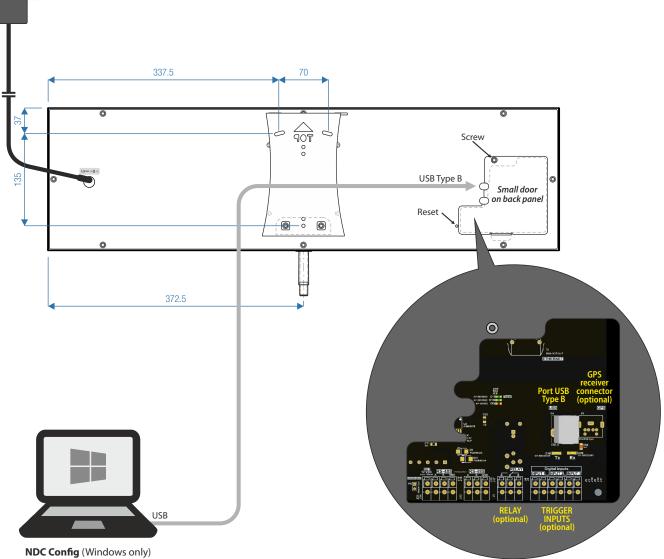
# **Clock Specifications**

Number of characters	6	
Height of characters	100 mm	
Displaying format	88:88:88, HH:MM:SS (time), DD:MM:YY (date), XX.X °C (temperature), XX rH (relative humidity)	
Readability range	Up to 40 meters	
LED type	Super-bright 7-segment LED modules	
LED colour	RED	
Viewing angle	120°	
Time accuracy	+/- 4 sec. max deviation per month, when no external time synchronisation is used	
Frame construction	Anodized aluminium frame, steel back panel coated with black powder paint	
Frame colour	Platinum grey (see picture on page 1)	
Front cover	Non-glare PMMA glass, grey tinted, 3 mm thick	
Class of protection	IP 20, indoor use only	
Interfaces	1x USB type B, for PC connection (for setting clock parameters or data logging) 1x IR, for remote control (used for setting clock parameters or data logging)	
Power supply	Power adapter 230 VAC /12 VDC, 2A (included)	
Power consumption	14 W max.	
Dimensions	745 mm x 208 mm x 64 mm	
Weight	4,2 kg	
Operating temperature	0°C ~ +70°C (indoor use only)	
Accessories included	Wall mounting brackets, screws and fasteners, power supply adapter, manual	
Software for PC (Windows) - available for download  DataLoggerTH - used for recording and viewing temp/humidity data on PC NDC_config - used for setting clock configuration parameters		

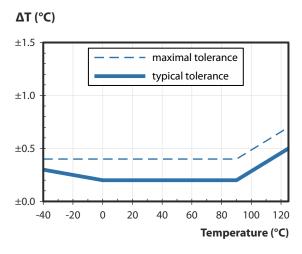
# **Sensor Specifications** (clock version NDC...THS, plug-in sensor included)

Temperature measuring range	-35°C ~ +70°C
Temperature accuracy	±0,3°C typical, see graph No. 1 on page 2
Humidity measuring range	0% ~ 99%
Humidity accuracy	±2% RH typical, see graph No. 2 on page 2
Sensor type	SHT31 ( Sensirion AG, Switzerland )
Communication interface	I2C, connector jack 3,5 mm on sensor probe - detachable from clock frame





## **Graphs - Temperature and Relative Humidity** (Sensirion SHT31 parameters)



**Graph No. 1:** Accuracy of temperature in °C.

#### **ΔRH (%RH)** ±8 maximal tolerance typical tolerance ±6 ±4 ±2 ±0 100 0 10 20 30 40 50 60 70 80 90 **Relative Humidity (%RH)**

**Graph No. 2:** Accuracy of relative humidity at 25°C.

## View options



