# A.S.P. Electronic

## DTH-CO2

#### Features

• Digital display of temperature, humidity and CO2 in a single device.

• High brightness and luminosity characters

• It has an external temperature and humidity probe (integrated CO2 sensor)

• Can receive data through communication bus (optional): Modbus RTU RS485 or ModBus TCP

• Complies with Royal Decree 1826/2009 (RITE RD 1826/2009) as well as Royal Decree 742/2013.

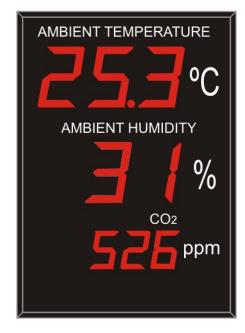
• IP41 degree of protection for commercial environments and IP64 version for outdoor

• Configurable sampling times.

### Applications

- · Supermarkets and department stores.
- Industrial ships.
- Angares aviation.
- Sports facilities.
- Auditoriums and exhibition halls.
- · Stations and airports.
- Data processing centers

Technical specifications



### Description

The DTH is a digital indicator with segment displays that visualizes the temperature and relative humidity captured through the STH-I probe, and the CO2 captured through the sensor embedded in the equipment or transmitted through the MODBUS RTU RS485 communications bus or MODBUS TCP.

It complies with the specifications established in the new Royal Decree 1826/2009 of November 27 (RITE RD 1826/2009) as well as Royal Decree 742/2013.

There is a model with IP64 for outdoor environments with a temperature and humidity sensor built into the device itself.

It has high-brightness segment displays, which allow the visualization of bright characters with a wide viewing angle. You can also set the screen on and off time automatically and the sampling intervals.

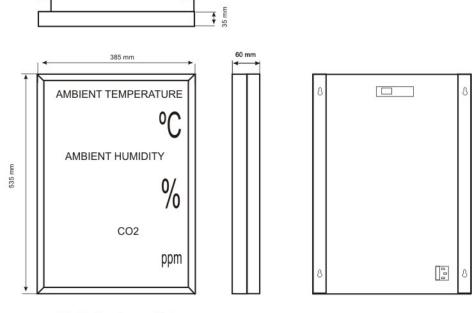
Parameters		
Power supply		240 -110Vac , 50/60 Hz with 1A fuse
Temperature measure		
	Range	-20°C to 50°
	Precision	+/- 0.35°C
	Resolution	0.1°C
	Nº inputs	1
	Response time	<10s
	Input	Temperature probe (I), configurable analog input in voltage (EA- V) 0-10V, 2-10V, 0-5V or in current 4-20mA (EA-420)
Humidity measure		
	Range	0% to 99% HR
	Precision	+/- 3.5 % HR
	Resolution	1% HR
	Nº inputs	1
	Response time	<10s
	Input	Hygrometer (I), configurable analog input in voltage (EA-V) 0- 10V, 2-10V, 0-5V or in current 4-20mA (EA-420)
CO2 measure		
	Range	400 to 2000 ppm
	Precision	±30 ppm +5% final value
	Resolution	1 ppm
	Nº inputs	1
	Response time	< 90 s, Heating time <5 min
	Input	NDIR sensor CO2 compensated in temperature ,configurable analog input in voltage (EA-V) 0-10V, 2-10V, 0-5V or in current 4-20mA (EA-420)

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Segments display		
	Vision angle	180 °
	Luminosity	> 35 mcd per segment
	Character dimensions	101 x 60 mm
Communications Bus	DTH-CO2-C	ModBus RTU RS485 ( Half Duplex )
	Slave	Configurable 0 to 63 ( 2 by default )
	Speed	Configurable 300 ,600,1200,2400,4800,9600 y 19200 bauds
	Parity	Configurable N,P,I ( N by default )
	Funtions	1 to 17
Communications Bus	DTH-CO2-C-TCP	ModBus TCP(RJ45)
	IP	Configurable 0-0-0 to 255-255-255-255
	Speed	10M Max.
	Functions	1, 3,5,6,15,16
Housing material		Black painted Iron sheet
Working temperature		-10°C - 50°C
Working humidity		10% to 80% HR without condensation
Storage temperature		- 20°C, +45 °C
Storage humidity		5% to 95% HR without condensation
Protection degree		IP41
Soporte		Tethering wall via screws
Programmable on-off time		Via pushbutton
Sample time		Via pushbutton
Adittional options		
Option -R		Two relays that are activated according to the T and H set points set in the configuration menu. Relays with one NO contact and 250mA.
Option -TR		Application of an anti-humidity treatment (tropicalized) to the electronic boards that allows their operation in environments with a high degree of humidity such as swimming pools.
Option -L		Customizable logo on the front of the equipment
Option -N		Without RITE logos RD 1826/2009 / RD742-2013
Dimensions		

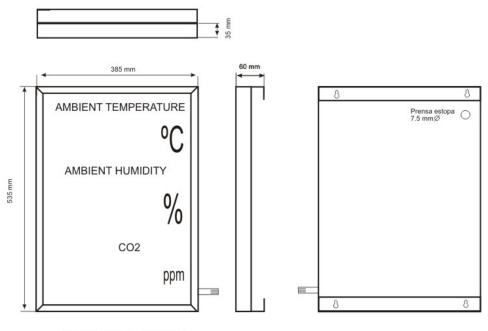
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Todas las dimensiones en milímetros All dimensions in milimeters

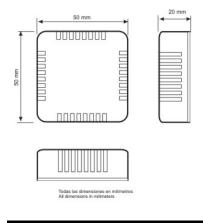
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Option -IP ( embedded )



Todas las dimensiones en milímetros All dimensions in milimeters

### **Dimensions STH-I**



Weight 5.0 Kg