



WWS 100

Temperature, CO₂ and humidity sensor with ventilation keypad and WSK-Link™



Natural
ventilation

Application

Indoor sensor for air quality monitoring by means of temperature, CO₂ level and relative humidity measurement. Typically, one sensor per room/zone is used but multiple sensors can be used in the same room/zone if e.g. minimum, maximum and mean values are requested. In addition to sensor functionalities, the unit also has a push-button for simultaneous operation of all windows or selected motor groups in the room/zone; e.g. close or open all windows.

The sensor is connected to a WindowMaster control unit type WCC 310 PLUS, WCC 320 PLUS, WSC 310 PLUS, WSC 320 PLUS, WSC 520, WSC 540 or WSC 560 via WSK-Link™. The number of sensors that can be connected to a controller depends on the controller type, see "Max. number of sensors per control unit".

WSK-Link™ is WindowMaster's effective, proprietary serial data networks protocol that integrates power supply and (serial) data communication in a three-conductor cable. WSK-Link™ is used for data communication between WindowMaster's latest generation of controllers, sensors and break glass alarms. The maximum cable length must not exceed 656' and devices must not be connected in a ring bus system.

WWS 100 is specifically designed as room sensor in NV Embedded® solutions.

Specifications

- Temperature range measured: 32-122°F.
- CO₂ range measured: 400-2000 ppm.
- Relative humidity range measured: 0-100%.
- Measurements will be sent directly to the controller via WSK-Link™.

Max. number of sensors per control unit:

- WCC 310 P: 15 x WWS 100
- WCC 320 P: 15 x WWS 100
- WSC 310 P: 2 x WWS 100 + 10 WSK 5xx
- WSC 320 P: 10 x WWS 100 + 10 WSK 5xx
- WSC 520: 10 x WWS 100 + 20 WSK 5xx
- WSC 540 per 20A section: 10 x WWS 100 + 20 WSK 5xx
- WSC 560 per 20A section: 10 x WWS 100 + 20 WSK 5xx

Guideline for the carbon dioxide concentration in rooms

CO ₂ -concentration	Assessment of air quality
< 800 pmm	Good
800-1400 pmm	Moderately
> 1400 pmm	Low / Unhealthy

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Technical specifications	
Power consumption	2mA
Power supply	via WSK-Link™
Connection	WSK-Link™, via MotorController type WCC 310 P / WCC 320 P or smoke control panel type WSC 310 P / WSC 320 P / WSC 520 / WSC 540 / WSC 560
Operating conditions	32°F - 122°F, for indoor wall mounting and must not be installed in dusty environments or covered
Materials	Self-extinguishing thermoplastic
Colour	Studio white (corresponding to RAL 9016)
Dimensions	3 1/4" x 4 1/2" x 15/16" (W x H x D)
Weight	0.25 lbs
CO ₂ accuracy	±150 ppm during product life cycle at 77°F and 950 - 1050 hPa
Calibration	Factory calibrated for higher than ±50 ppm at 600 ppm and 1000 ppm. Auto-calibration using ABC logic™
Measurement of relative humidity	1 - 100% ±3% at 77°F
Measurement of temperature	32°F - 122°F, ±0.9°F at 77°F and ±1.8°F at 32..122°C
Operation	Must not be exposed to mechanical shock or excessive vibration
Cabling class	IP20, Class III (SELV/PELF)
Delivery	Sensor
Reservations	Subject to technical changes

Variants	Item no.
Temperature, CO ₂ and humidity sensor – WSK-Link™	WWS 100

All dimensions are originally in metric units and converted into imperial units.
For exact measurements please refer to documentation with metric values.