




# Environmental sensors

## Environmental sensors - CGES series



Types	CGESHTD..N CGESHTPD...N	CGESHTW CGESHTPW	CGESAIRVEL
			
Dimensions (mm)	80 x 80 x 37.2 (probe 200 mm)	85 x 100 x 26	80 x 80 x 37.2 (cable length 1m)
Function	Humidity and Temperature	Humidity and Temperature	Air Velocity measurement
Mounting	Duct mounting	Wall mounting	Duct mounting
<b>Input specifications</b>			
Relative humidity Working range Accuracy @ 20°C	10 to 95% ±2.5% RH	0 to 95% ±2% (40 to 60%RH) ±3% (10 to 90%RH)	
Temperature Sensor Accuracy @ 20°C	Pt1000 DIN A ±0.3°C	Pt1000 DIN A / Pt100 DIN A Vout: ±0.25°C / Aout: ±0.4°C	
Air Velocity Working range			0 to 10 m/s (0 to 2000 ft/min) 0 to 15 m/s (0 to 3000 ft/min) 0 to 20 m/s (0 to 4000 ft/min) ±0.2 m/s +3% of m.v.
Accuracy @ 20°C			
<b>Electrical specifications</b>			
Output	0-10 V or 4-20 mA (2 wires)	0-10 V or 4-20 mA (2 wires)	0-10 V or 4-20 mA
Supply Voltage	24 VAC ±20% / 15-35 VDC	24 VAC ±20% / 15-35 VDC	24 VAC/DC ±20%
Consumption DC supply AC supply	typical 5 mA typical 13 mAeff	typical 4 mA typical 15 mAeff	max. 150 mA max. 90 mA
<b>General specifications</b>			
Cable gland	M16 x 1.5 cable Ø4.5 - 10 mm		M16 x 1.5 cable Ø4.5 - 10 mm
Electrical connections	Screw terminals max. 1.5 mm <sup>2</sup> (AWG 16)	Screw terminals max. 1.5 mm <sup>2</sup> (AWG 16)	Screw terminals max. 1.5 mm <sup>2</sup> (AWG 16)
Working temperature range	-15°C to 60°C	-5°C to 55°C	-10°C to 50°C
Storage temperature range	-25°C to 60°C	-25°C to 60°C	-30°C to 60°C
Degree of protection	IP 65; Nema 4	IP 20	IP 65; Nema 4
Conformity	EN 61000-6-1, EN 61000-6-3, EN 61326-1+A1+A2	EN 50081-1 FCC Part15 ClassB EN 50082-1 ICES-003 ClassB	EN 50081-1, EN 50082-1, EN 50082-2
Approvals/Marks	CE - RoHS	CE - RoHS	CE - RoHS
<b>References</b>			

For ordering key details, please refer to [www.productselection.net](http://www.productselection.net)



# Environmental sensors

## Environmental sensors - CGES series

Types	CGESCO2W - CGESCO2TW - CGESCO2THW	CGESCO2D...N
		
Dimensions (mm)	85 x 100 x 26	80.6 x 101 x 46 (probe 200 mm)
Function	CO <sub>2</sub> , Relative Humidity and Temperature	CO <sub>2</sub>
Mounting	Wall mounting	Duct mounting
<b>Input specifications</b>		
Relative humidity Working range Accuracy @ 20°C	10 to 90% ±3% (30 to 70% RH) ±5% (10 to 90% RH)	
Temperature Sensor Accuracy @ 20°C	Pt1000 DIN A Vout: ±0.3°C / Aout: ±0.7°C	
CO <sub>2</sub> Working range Accuracy @ 20°C 2000 ppm 5000 ppm	0 to 2000 ppm / 0 to 5000 ppm  < ± 50 ppm +2% of m.v. < ± 50 ppm +3% of m.v.	0 to 2000 ppm / 0 to 5000 ppm  < ± 50 ppm +2% of m.v. < ± 50 ppm +3% of m.v.
<b>Electrical specifications</b>		
Output	0-10 V or 4-20 mA or switching	0-10 V or 4-20 mA
Supply Voltage	24 VAC ±20% / 15-35 VDC	24 VAC ±20% / 15-35 VDC
Consumption DC supply AC supply	<3 W <3 W	<3 W <3 W
<b>General specifications</b>		
Cable gland		M16 x 1.5 cable
Electrical connections	Screw terminals max. 1.5 mm <sup>2</sup> (AWG 16)	Screw terminals max. 2.5 mm <sup>2</sup> (AWG 14)
Working temperature range	-5°C to 55°C	0°C to 50°C
Storage temperature range	-20°C to 60°C	-20°C to 60°C
Degree of protection	IP 20	IP 65; Nema 4
Conformity	EN 61000-6-3, EN61326-1+A1+A2:05.2002 EN 61000-6-1	EN 61000-6-3 ÖVE EN61326-1+A1+A2:05.2002 EN 61000-6-1, FCC Part 15 ICES-003 ClassB
Approvals/Marks	CE - RoHS	CE - RoHS
<b>References</b>		
For ordering key details, please refer to <a href="http://www.productselection.net">www.productselection.net</a>		

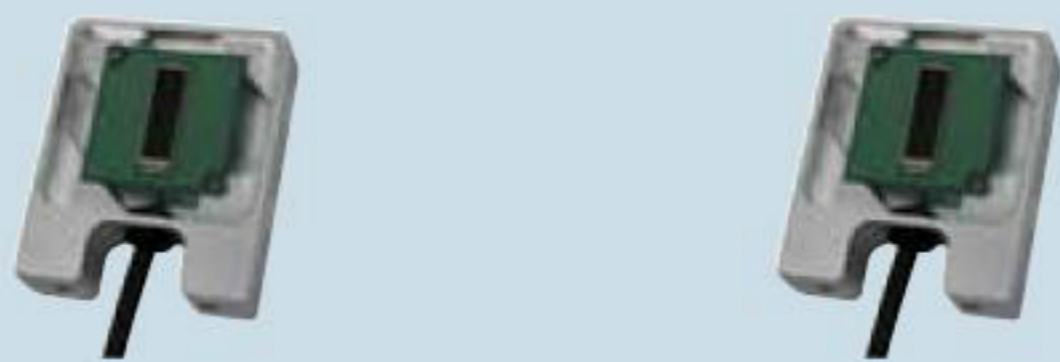


## Environmental sensors

	Wind vane	Cup anemometer
Types	DWS-D-D...	DWS-V-D...
Connections	2 m cable	2 m cable
		
Dimensions (mm)	207 x 174	183 x 145
Function	Wind direction	Wind speed
<b>References wind vane</b>		
Wind indication	0° and 90° intervals <b>DWS-D-DAC13</b>	
Wind indication	±7° and left/right <b>DWS-D-DDC13</b>	
<b>References cup anemometer</b>		
Operating temperature		-20°C to 60°C
Heating		Yes
Air Velocity		from 1.5 m/s to 30 m/s <b>DWS-V-DAC13</b>
Operating temperature		0°C to 60°C
Heating		No
Air Velocity		from 1.5 m/s to 30 m/s <b>DWS-V-DBC05</b>
<b>General specifications</b>		
Rated operating voltage	12 - 24 VDC	12 - 24 VDC
Voltage drop	Typ. 4.9 VDC	Typ. 4.9 VDC
Degree of protection	IP 54	IP 54
Output frequency		10 Hz pr. m/s
Signal	NPN/PNP square wave 12.5 mA ± 2 mA	
Housing material	Body: Black PVC Rotor: Stainless steel	Body: Black PVC Rotor: Stainless steel
Approvals/Marks	CE	CE



# Environmental sensors

	Solar irradiance sensor		Pyranometer
Types	PVS-1V	PVS-1A	PVS-2A
Connections			
Dimensions (mm)	57 x 48 x 15 (not including clamp)	62 x 48 x 15 (not including clamp)	162 x 215 x 40
Description	Solar irradiance sensor based on photovoltaic technology built with a solid aluminium case and anti-UV encapsulating resin	Solar irradiance sensor based on photovoltaic technology built with a solid aluminium case and anti-UV encapsulating resin	Global solar radiation sensor based on a thermopile transducer compliant with WMO (World Meteorological Organization) standards for environmental monitoring, provided with worldwide valid calibration certificate

## Environmental specification

Operating temperature	-10°C to 80°C	-10°C to 80°C	-40°C to 80°C
Degree of protection	IP 67	IP 67	IP 67

## General specification

Technology	Crystalline calibrated cell	Crystalline calibrated cell	2nd Class Thermopile Pyranometer according to ISO9060
Output	80 mV @ 1000 W/m <sup>2</sup> STC	4-20 mA	4-20 mA
Calibration	According to IEC 60904-2 and 60904-4 (calibration certificate as option)	According to IEC 60904-2 and 60904-4 (calibration certificate as option)	According to ISO9847 (calibration certificate included)
Solar irradiance range	0-1250 W/m 20-1250 W/m <sup>2</sup>	0-1250 W/m 20-1250 W/m <sup>2</sup>	0-2000 W/m 20-2000 W/m <sup>2</sup>
Connector	3 PIN Phoenix M8 IP67 connector (male and female included)	3 PIN Phoenix M8 IP67 connector (male and female included)	7 pin IP68 connector (male, female and 10 meters cable included)
Housing material	Aluminium	Aluminium	Aluminium
Power Supply	Self-powered	Powered by VMU-P module through the 4-20 mA current loop	10-28 VDC, power consumption < 0.1 W
Approvals/Marks	CE	CE	CE

## References

For ordering key details, please refer to [www.productselection.net](http://www.productselection.net)