
 <b>DS2225en</b>	<b>Data Sheet</b>	
<b>GOW1-Series (CO<sub>2</sub>)</b>	<b>Outdoor Air Quality (CO<sub>2</sub>) Sensor with Active Outputs</b>	

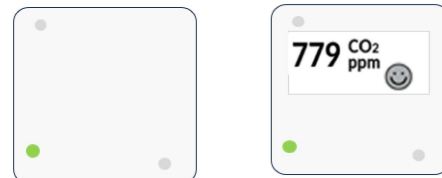
The GOW1-Series (CO<sub>2</sub>) is designed to measure air quality (CO<sub>2</sub>) in outdoor areas, plant rooms, factories, cold stores, greenhouses and warehouses



The sensor operates with low voltage power supply

In accordance with RESET® and WELL Building Standard™

With operation LED, optional with ePaper display available








The sensor outputs are active

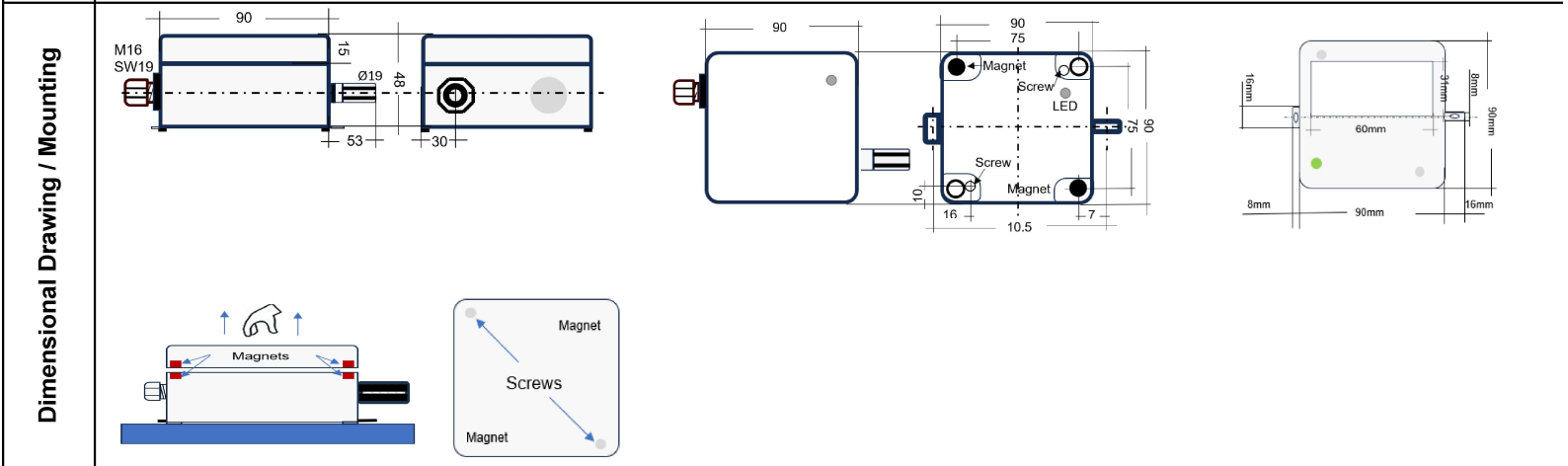
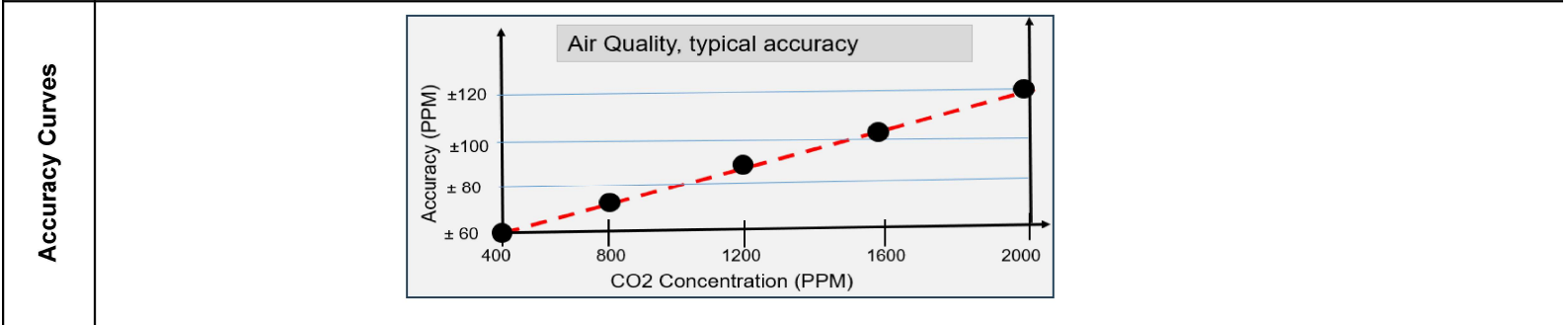
<b>Use</b>	Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System
	Used in all common HVAC applications
	Used in Commercial and Industrial Buildings

<b>Features</b>	Sensor with active output
	Sensor outputs 0–10 V or 4–20 mA
	Optional with ePaper display available
	Reading/Parameter settings via NFC technology
	Cover/bottom housing connected with magnets and 2 screws
	Immersion Pockets in Stainless Steel
	Firmware updates via service connector
Easy to use, install and maintain	

<b>Product Range</b>	Order Codes	General Parameters				Air Quality (CO <sub>2</sub> )	
		Sensor Output	Pocket Length	Display	Power Supply	IP Rating	Parameters
	GOW1G.AA	0–10 V	50 mm	N/A	AC/DC 24 V (±10 %)	IP65	Accuracy ±(50 ppm +3 % of reading) Measuring Range 0 to 2000 ppm Repeatability ±10 ppm Response time t <sub>93</sub> = 60 s
	GOW1G.AD	4–20 mA					
	GOW1G.BA	0–10 V		ePaper display 31 × 60 mm			
GOW1G.BD	4–20 mA						

<b>Sensor Specification</b>	<b>Sensor Specification</b>	Measured	Air Quality (CO <sub>2</sub> )
		Sensor Characteristics	Active
		Sensor Output (s)	0–10 V or 4–20 mA
		Output Load	
		0–10 V output	Min. load 5 kΩ @ AC/DC 24 V
		4–20 mA output	Max. load 700 Ω @ DC 24 V
	<b>Air Quality (CO<sub>2</sub>)</b>	Accuracy	±(50 ppm +3 % of reading)
	Repeatability	±10 ppm	
	Response Time	t <sub>63</sub> = 60 s	
	Measuring Rang	0 to 2000 ppm	
<b>Technical Information</b>	<b>Electrical Information</b>	Power Supply	AC/DC 24 V (±10 %)
		Frequency	50/60 Hz at AC 24 V
		Terminal Clamp	Screw terminal, max. 1.5 mm <sup>2</sup>
		Power Consumption	
		0–10 V output	≤1 W
		4–20 mA output	≤1 W
	<b>Mechanical Information</b>	PIN bar	Bootloader for software updates
		Display	ePaper 31 mm × 60 mm
		Immersion Pocket	Ø19.5 mm × 50 mm
	<b>Materials and Colours</b>	Housing Cover	ABS, white / transparent (display)
		Housing Bottom	ABS, white
		Sensor Pipe	ABS, white
		Flammability Standard	UL94class HB ; IEC 6070 ; ISO 9770
	<b>Environmental Conditions</b>	Operation Temperature	0 °C to +50 °C
		Operation Humidity	<85 % RH, no condensation
		Transport Temperature	-35 °C to +70 °C
		Transport Humidity	<90 % RH
		Storage Humidity	<85 % RH, no condensation
	<b>Norms and Directives</b>	IP-Rating	IP65 to IEC60529
		REACH Regulation	Regulation (EC) No. 1907/2006
		Product Safety	Safety class III, in accordance. with EN IEC 60730-1
	Product Standard	Automatic electrical controls for household and similar use in accordance with EN IEC 60730-1:2022	
	CE marking in accordance with Directive	2014/30/EU Electromagnetic Compatibility (EMC)	
	EMC Emissions, in accordance with	EN IEC 60730-1:2022	
	EMC Immunity, in accordance with	EN IEC 60730-1:2022	
	RoHS Compliance, in accordance with	Directive 2011/65/EU, as amended by (EU) 2015/863	
	Operation Climatic Condition	IEC 60 721-3-3	
	Operation Mechanical Condition	IEC 60 721-3-2 to class2M2	
	Transport to Climatic Condition	IEC 60 721-3-2	
	Transport Mechanical Condition	IEC 60 721-3-2 to class2M2	
	Storage Climatic Condition	IEC 60 721-3-1	
	Storage Mechanical Condition	IEC 60 721-3-1 to class2M2	
<b>Accessories</b>	N/A		
<b>Shipping &amp; Handling</b>	Minimum Order	1 box with 1 piece	
	Packaging	Rigid cardboards packaging	
<b>Order Notes</b>	Order Code	See product range, page 1, e.g. GOW1G.AA	

	<p><b>Installation Notes</b></p>  <p>Observe the following general regulation for engineering and installation:</p> <ul style="list-style-type: none"> <li>All relevant national and local electrical installation codes</li> <li>Other country-specific regulations</li> <li>Comply with all local safety regulations, schematics, cable listings, dispositions, specifications, and arrangements from the engineering office in charge</li> <li>Third-party specifications, e.g., general contractors' or constructors' notes</li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Advices</b></p>	<p><b>Mounting Advices</b></p>  
	<p><b>Disposal Notes</b></p>  <p>The device is considered an electronic device for disposal in terms of the European Directive 2012/19/EU</p> <p>The device may not be disposed as domestic garbage</p> <p>The device must be disposed through channels provided for this purpose</p> <p>It is mandatory to comply with local currently applying laws and regulations</p>
	<p><b>NFC Setting</b></p>  <p>All devices marked with the NFC Logo can be parameterized via the Gruner AP NFC APP</p> <p>The NFC APP is available on the Gruner AP Website, <a href="https://www.grunerasiapacific.com/">https://www.grunerasiapacific.com/</a></p> <p>Hold your NFC-capable Android phone to the NFC Logo, the installed APP will start automatically</p> <p><b>Commissioning Note:</b> The sensor will reach its specified accuracy after 1 hour of being powered up</p>



**Connections & Settings**

Terminal Connections						
S1	S2	S3	S4	S5	S6	S7
N/A	N/A	Air Quality (CO <sub>2</sub> )	GND	UB+	24 V AC/DC	N/A
					N/A	N/A