

 DS2226en	Data Sheet	
GOW1-Series (CO2)	Outdoor Air Quality (VOC) Sensor with Active Outputs	

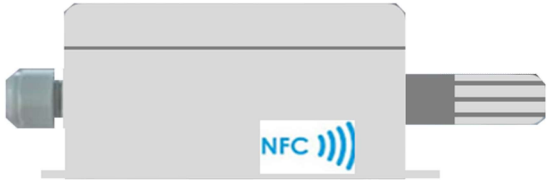
The GOW1-Series (VOC) is designed to measure air quality (VOC) in outdoor areas, plant rooms, factories, cold stores, greenhouses and warehouses

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



Use	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

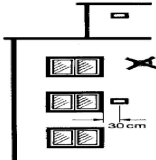
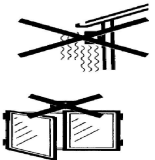
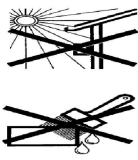
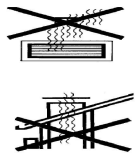
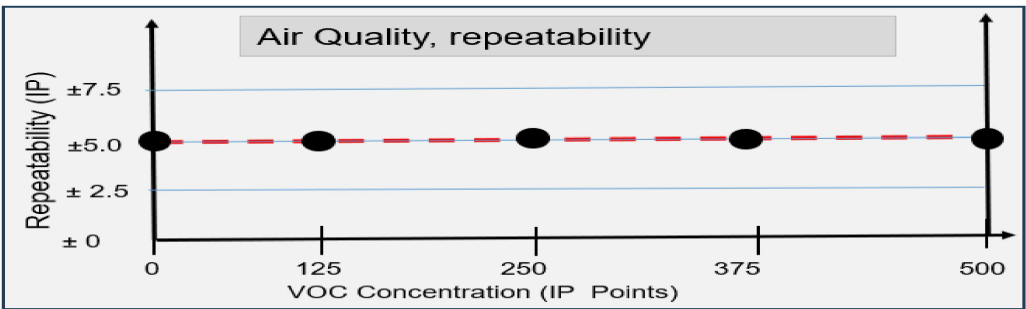
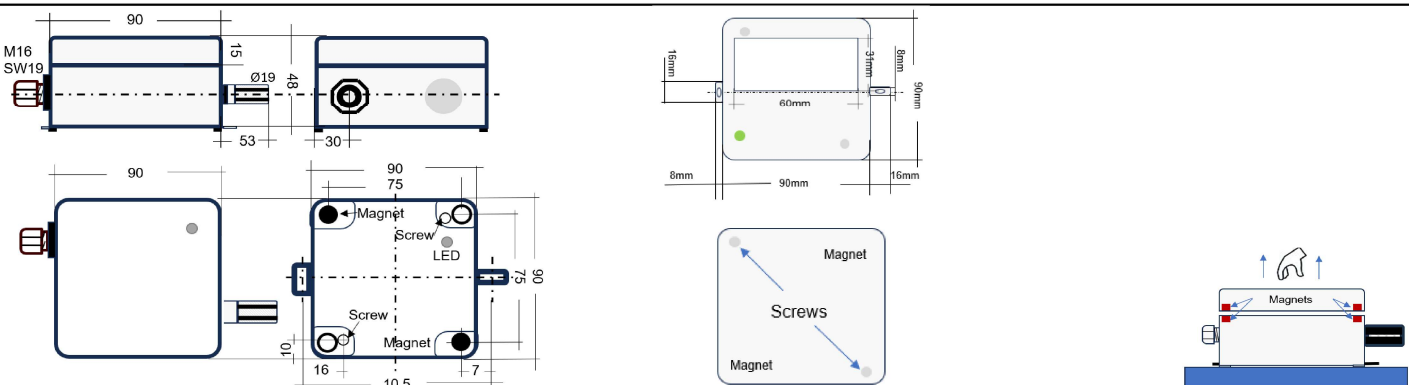
Features	Sensor with active output
	Sensor outputs 0–10 V or 4–20 mA
	Optional ePaper display available
	Reading/parameter settings via NFC technology
	Cover/bottom housing connected with magnets and 2 screws
	Immersion pockets in stainless steel
	Firmware updates via service connector
	Easy to use,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

Product Range	Order Codes	General Parameters				Air Quality (VOC)	
		Sensor Output	Pocket Length	Display	Power Supply	IP Rating	Parameters
	GOW1G.CA	0–10 V	50 mm	N/A	AC/DC 24 V (±10 %)	IP65	Device-to-Device variation: ±15 Index Points (3.3 %) Measuring Range: 0 to 500 Index Points (0 to 100 %) Repeatability: ±5 Index Points (1 %) Response time: t_{63} = 10 s
	GOW1G.CD	4–20 mA					
	GOW1G.DA	0–10V		ePaper 31 mm x 60 mm			
	GOW1G.DD	4–20mA					

Sensor Specification	Sensor Specification	Measured	Air Quality (VOC)
		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
	Air Quality (VOC)	4–20 mA output	Max. load 700 Ω @ DC 24 V
		Device-to-Device variation	±15 Index Points (3.3 %)
		Repeatability	± 5 Index Points (1 %)
		Response Time	t ₆₃ = 60 s
		Measuring Range	0 to 500 Index Points (0 to 100 %)
Technical Information	Electrical Information	Power Supply	AC/DC 24 V (±10 %)
		Frequency	50/60 Hz at AC 24 V
		Terminal Clamp	Screw terminal, max. 1.5 mm²
		Power Consumption	
		0–10 V output	≤1 W
		4–20 mA output	≤1 W
	Mechanical Information	Cable Entry	PG16 / SW19
		PIN bar	Bootloader for software updates
		Display	ePaper 31 mm × 60 mm
		Pocket	Ø19.5 mm × 50 mm
	Materials and Colours	Housing Cover	ABS, white
		Housing Bottom	ABS, white
		Sensor Pipe	ABS, white
		Flammability Standard	UL 94 class HB; IEC 60707; ISO 9770
	Environmental Conditions	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
	Norms and Directives	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	
Miscellaneous		Accessories	N/A
		Shipping & Handling	Minimum Order
	Packaging		Rigid cardboard packaging
	Order Notes	Order Code	See product range, page 1, e.g. GOW1G.CA

All Information and technical data are subject to alteration

GOW1-Series (VOC) V26.1

Advices	Installation Notes 	Observe the following general regulation for engineering and installation: All relevant national and local electrical installation codes Other country-specific regulations Comply with all local safety regulations, schematics, cable listings, dispositions, specifications, and arrangements from the engineering office in charge Third-party specifications, e.g., general contractors' or constructors' notes																												
	Mounting Advices 	   																												
	Disposal Notes 	The device is considered an electronic device for disposal in terms of the European Directive 2012/19/EU The device may not be disposed as domestic garbage The device must be disposed through channels provided for this purpose It is mandatory to comply with local currently applying laws and regulations																												
	NFC Setting 	All devices marked with the NFC Logo can be parameterized via the Gruner AP NFC APP The NFC APP is available on the Gruner AP Website, https://www.grunerasiapacific.com/ Hold your NFC-capable Android phone to the NFC Logo, the installed APP will start automatically Commissioning Note: The sensor will reach its specified accuracy after 1 hour of being powered up																												
Accuracy Curves																														
Dimensional Drawing / Mounting																														
Connections & Settings	<table><tr><th colspan="7">Terminal Connections</th></tr><tr><th>S1</th><th>S2</th><th>S3</th><th>S4</th><th>S5</th><th>S6</th><th>S7</th></tr><tr><td>N/A</td><td>N/A</td><td>Air Quality (VOC)</td><td>GND</td><td>UB+</td><td>N/A</td><td>N/A</td></tr><tr><td></td><td></td><td></td><td></td><td>24 V AC/DC</td><td></td><td></td></tr></table>		Terminal Connections							S1	S2	S3	S4	S5	S6	S7	N/A	N/A	Air Quality (VOC)	GND	UB+	N/A	N/A					24 V AC/DC		
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