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## Low Contents Oxygen Analyzer

# TOA MP



Rack 19" version



Portable version

#### **Main characteristics**

- · Electrochemical cell replaceable
- Maintenance free
- Specific with absolute zero and linear output
- Unaffected by flow rate, hydrocarbons
- · Air calibration possible
- Sensor insulation valves

#### **Main applications**

- Gas purity monitoring (N<sub>2</sub>, AR, H<sub>2</sub>, CO<sub>2</sub>, He, ...)
- Inertages
- Heat treatment atmospheres
- Gloves box atmospheres
- VCM purity
- Electronic applications (lamp and semi-conductors)

The oxygen analyzer TOA MP integrates a maintenance free sealed electrochemical sensor and a complete new microprocessor electronics.

The touch sensitive display allows the user to see very quickly all parameters: ppm O2 content, analog output range, temperature control, alarms status, and to get access to the menus. The instrument integrates some data storing facilities (350 data memory as standard and memory extension with SRAM card as option).

It gives a complete traceability on the events that occur on the analyzer: alarms threshold, error messages, calibration, configuration, etc. All these data are available on parallel output (for printer connection) and on digital interface RS232.

The automatic calibration function is very easy to use and allows: calibration values setting, calibration sequence performed manually, at set time or at regular intervals; calibration on one or two points; safety procedure in case of error on the gas used for calibration.



Technical specifications may change without previous warning

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### **Technical Characteristics**

	Version Rack 19"	Version portable	
Measurement principle	Electrochemical sensor		
Measurement range	0 – 10000ppm, automatic display		
Accuracy*	± 0.05% absolute vol.		
Repeatability*	± 0.05% absolute vol.		
Display resolution	3 levels of display resolution : 1. $0-999.9 \text{ ppm (1 decimal)}$ 2. $1000-4999 \text{ ppm (0 decimal)}$ 3. $0.5-24.9\%$ (1 decimal) If $O_2 > 24.9\%$ , blinking : out of measurement range		
Linearity*	Better than ± 0.5% vol.		
Zero drift*	< 0.1% absolute vol. / week		
Response time	T <sub>95</sub> < 30sec		
Sensor	Temperature monitored at +40°C		
Operating temperature	From 0 to +50°C		
Inlet pressure	From 0.1 to 1.5 relative bar		
Flow rate	Flowmeter with valve 0 – 1 L/min, recommended : 0.5 L/min		
Output signals	4 – 20 mA, 0 -10 V, RS232, parallel		
Sampling	The gas must be clean and dry		
Gas connections	Fittings : 1/8" NPT female		
Alarms	2 alarms with an adjustable threshold, settable as high or low alarm Analyzer default alarm Flow rate default alarm (with optional external flow rate detector) TTL 5V output to pass by the interface box		
Power supply	230 VAC – 50/60 Hz	Rechargeable battery	
Dimensions (L * H * P)	483 * 133 * 400 mm	310 * 200 * 210 mm	
Weight	10 kg	10 kg	

<sup>\*</sup> At constant pressure and temperature



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### Codification

Device				
TOA	ARCMP1			
Integrated options			_	
No options		0		
Special cell for O <sub>2</sub> measurement in CO <sub>2</sub>		2		
Sample cell equipped with cooler for O <sub>2</sub>		3		
Voltage				
230 VAC		0		
110 VAC			1	
Analyzer type				
Sensor integrated in Rack instrument				-
Analyzer with remote sensor				SC
Analyzer with remote sensor for Glove box				GB
Portable analyzer				Р
Electronic only: Rack without sensor				RD
Remote sensor only				RS

Separate options				
Power interface box Alarm relay, management of automatic calibration		ARC00578+		
Internal membrane pump	Only for portable instruments	ОРТРОМРЕ		

Spare parts			
O <sub>2</sub> ppm sensor	Electrochemical cell	ARCB210+	
O <sub>2</sub> ppm sensor	Electrochemical cell, for application with CO <sub>2</sub>	ARCA310+	

