

## Advanced Digital Meter

# ODEON®

*Reliability, simplicity and flexibility*



- **ALWAYS READY TO MEASURE** : *Digital plug and play probes*
- **ALWAYS CONFIDENCE** : *Autodiagnostic, status always displayed, GLP compliance*
- **SIMPLICITY** : *4' display and intuitive menus*
- **HIGH PERFORMANCES** : *Mono/Multiparameters - 8 Mo Memory (100 000 data)*
- **FIELD INSTRUMENTATION** : *IP67*



. pH/ORP



. Dissolved Oxygen  
*OPTOD Optical Technology*



. Conductivity



. Turbidity

Access to high performances with the **PONSEL ODEON®** Digital Handheld Instrumentation.

A real combination of simplicity, flexible, reliability and reduced maintenance technologies, the ODEON Meters offer you a total confidence in your readings in laboratory and field conditions.

This range of **6 ODEON Meters** are available in the **Classic Line** (single channel meters), **Open Line** (Versatile single channel meters), **X Line** (Versatile bi-channels Meters) to meet all your requirements

Datasheet : ODEON Range

Applications : Wastewater, drinking water natural water...

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## ➤ ODEON<sup>®</sup> METERS *Classic Line, One Line and X Line*



Watertight all-purpose connectors **Clic-Loc™ Plug**

- **User friendly**  
*Intuitive menus - No user manual required*
- **Comfortable and easy to read**  
*Large 4' backlighted display*
- **PC USB connection**
- **Easy handling in all situations**  
*Only 5 buttons for all functions*
- **High autonomy**  
*Low Power technology*



Models		Classic Line				Open Line	
		pH/ORP/T	Oxygen / T	Conductivity	Turbidity 0 4000 NTU 0-4500 mg/L	One	X
Probes compatibility	PH/ORP/T	X				X	X
	OPTOD		X			X	X
	Conductivity			X		X	X
	Turbidity				X	X	X
Probe Channels		1				2	
Digital Technology		CLASSIC Possibility to upgrade to OPEN Technology				OPEN	
Memory		100 000 points (with sample ID, User ID, date and time..)					
Data Management		GLP compliance					
ID		Samples, Campaigns, Users : Alphanumeric, 10 words max, 20 users max					
Reading/Recording		3 modes : Manual, interval,continuous					
Sensor status Indicator		Yes					
Autodiagnostic		Yes					
Display		Large backlighted graphic LCD 4' display, 240 x 320. Automatic switch in economic mode. With date, time, user and sample user, °C, status, pressure. Simultaneous display of 1 to 7 parameters (max)					
Power supply		4 AA batteries or chargeable batteries (battery charger needed)					
Autonomy		200 hours with standard batteries (in economic mode)					
Interfaces		-USB -RS 485 interface to probes (1 or 2) -External 12 V battery -Charger					
Box		PC/ABS					
Dimension - Weight		196 x 121x 46 mm - 400 g					
Protection		Outdoor instrument, IP67, Watertight					
Operate temperature		- 10 to + 60°C					
Storage temperature		- 25 to + 65°C					
Operate hydrometry		> 80%					



## ➤ PONSEL Digital probes

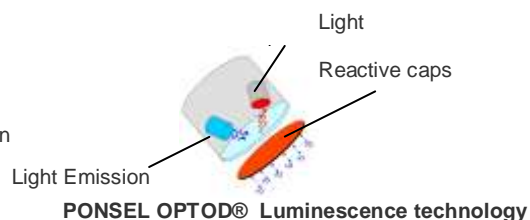
- **Plug and Play digital probes**  
*Your probe is immediately ready to use*
- **High fiability and confidence in your readings**  
*Autocheck, status and calibration autodiagnostic*
- **Robust probes**  
*Outdoor use design for Laboratory, wastewater, natural water, fishfarming applications.*
- **Flexible and smart probes**  
*Calibration and history data inside*
- **Ultra low power probes**  
*For long term campaigns*
- **PONSEL Probes**  
*50 years experience in probes manufacturing*



### DISSOLVED OXYGEN *OPTOD® Optical Luminescence Technology*



- No Calibration, No membrane, No electrolyte, No drift
- No cross sensitivity with pH 1 -14, CO<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>
- Real Time Temperature, Salinity and Pressure Compensation
- Fast response sensor
- No O<sub>2</sub> consumption : Precision in low O<sub>2</sub> concentrations
- ASTM International Method D 888 – 05 compliance



### TURBIDITY

#### *IR Nephelometry 0 – 4 000 NTU ; 0-4500 mg/L*



- IR Sensor – Optical fiber technology
- Precise and accurate measurements
- Calibration in mg/L
- No sampling – real turbidity value with direct measurement
- ISO 7027 compliance

### pH / ORP



- pH/ORP/Temp sensor
- PONSEL "PLASTOGEL"® Plasticized electrolyte
- Temperature compensation
- Robust field probe
- Cost effective : only pH/ORP Cartridge technology

### CONDUCTIVITY

#### *PONSEL C4E*



- Conductivity / Salinity / Temp sensor
- C4E electrode
- Temperature compensation
- Robust field probe
- No maintenance



## ➤ Datasheets

Probes	pH/ORP T		Oxygen / T	Conductivity / T	Turbidity / T
<b>Applications</b>	Laboratory and field conditions		Laboratory and field conditions	Laboratory and field conditions	Laboratory and field conditions
<b>Compatibility</b>	Wastewater, drinking water, seawater, rivers, natural water.....		Wastewater, drinking water, seawater, rivers, natural water.....	Wastewater, drinking water, seawater, rivers, natural water.....	Wastewater, drinking water, seawater, rivers, natural water.....
<b>Sensors</b>	pH, ORP, Temperature		OPTOD, Temperature	Conductivity, Salinity, temperature	Turbidity, Temperature
<b>Dimension (D x L)</b>	23 x 159 mm		25 x 146 mm	27 x 177 mm	27 x 170 mm
<b>Standard Cable lenght</b>	3 m		3 m	3 m	3 m
<b>Weight with 3 m cable</b>	350 g		450 g	350g	300 g
<b>Protection Class</b>	IP68		IP68	IP68	IP68
<b>Operate temperature</b>	-10°C – 50°C		-10°C – 50°C	-10°C – 50°C	-10°C – 50°C
<b>Temperature sensor</b>	CTN		CTN	CTN	CTN
<b>Interface communication</b>	Modbus RS 485		Modbus RS 485	Modbus RS 485	Modbus RS 485
<b>Material</b>	PVC		Inox 316 L	PVC	PVC PMMA
<b>Spare</b>	pH/ORP Cartridge		DOdisk®	-	-
<b>Electronic Warranty</b>	2 years		2 years	2 years	2 years
<b>parameters</b>	<b>pH</b>	<b>ORP</b>	<b>Dissolved Oxygen</b>	<b>Conductivity Salinity</b>	<b>Turbidity</b>
<b>Range</b>	0,00 – 14,00 pH	-1000,0 mV +1000,0 mV	0,00 – 20,00 mg/L  0 – 200% SAT	4 ranges 0-200,0 µS/cm 0 –2000 µS/cm 0,00 –20,00 mS/cm 0,0 –200,0 mS/cm	0 - 4000 NTU 4 ranges : 0,0 – 50,0 NTU 0,0 – 200,0 NTU 0 – 1000 NTU 0 – 4000 NTU
<b>Scale switch</b>	-	-	-	Manual/Automatic	Manual/Automatic
<b>Resolution</b>	0,01 pH	0,1 mV	0,01 mg/L 1%SAT	0,01 to 1 µmS/cm	0,1 to 1 NTU -mg/L
<b>Accuracy</b>	± 0,1 pH	± 1 mV	± 0,1 mg/L ± 1 %	± 1 % of the full scale	< 5 % of the full scale NTU
<b>Compensation</b>	Temperature	-	Pressure, temp, salinity (Mode : Off, Manual, Automatic)	Temperature	Temperature
<b>Measurement principe</b>	plasticized PONSEL "PLASTOGEL"®. electrolyte Ag/AgCl reference	Platinum electrode Ag/AgCl reference	PONSEL OPTOD® optical luminescence technology ASTM D888 – 05 Complinace	C4E Technology 4 electrodes (2 platinum and 2 graphite)	IR 90° technology ISO 7027 compliance
<b>Response time t90 Full range : 0 – 100%</b>	< 5 s	< 5 s	< 1 s	< 5 s	< 5 s

## ➤ Standard Set

<b>Meter</b>	1 Meter <b>ODEON Classic, ODEON OPEN ONE</b> or <b>ODEON X</b> (with 4 AA batteries)
<b>Probes</b>	1, 2, 3 or 4 Digital PONSEL probes with 3 meters cables
<b>Charger</b>	1 230 V Charger
<b>ODEON PC Cable</b>	1
<b>Standard solutions</b>	125 mL standard solutions (according parameters)
<b>Carrying case</b>	Outdoor case, plastic case, shockproof, lightweight; for 2 probes, PC cable, Charger and and 4 bottles of standard solution(125 ml)
<b>PC Software</b>	Wintek Viewer

## ➤ Accessories/Options

- **Standard solutions (125 mL) :**  
pH : 4,01-7,01-10,01 ORP : 240 mV  
Conductivity : 84 µS/cm, 1413 µS/cm et 12 880 µS/cm / **Turbidity** : Formazine
- **Cable lengths** : 7 m / 15 m (other on demand)
- **Carrying case**
- **Software** : WINTEK
- **ODEON Upgrade** : Classic to Open line
- **12 V external power supply cable**

