

Chongqing Drawell Instrument Co., Ltd & Shanghai Drawell Scientific Instrument Co., Ltd via Drawell International Technology Limited is a professional manufacturer and exporter of laboratory equipment and scientific instruments, founded in 1999. Drawell has over 50 employees in total, including 5 departments: Sales Dept. Operation Dept. Supply Chain. Finance Dept. Design Dept. and Administration Dpet. For us, the top priority is to provide our customers with the best service.

Therefore, all our employees are highly qualified after rigorous product training and working principles learning.

Drawell is specialized in R&D research. Our products include laboratory and medical instruments, such as Spectrophotometer, Refractometer, Microscope, Centrifuge, Chromatograph, Incubator, Drying Oven, Polarimeter, Balance, Homogenizer, AAS, Autoclave, Deep Freezer, XRF, XRD, Ultrasonic Cleaner, Freeze Dryer, Elisa Reader, Lab Furniture, FTTR, Water Bath, and etc. They are widely used in Pharmaceutical and food QC, Educational research, Environmental science, Chemical industry and other areas.



To keep sharp on the international market, we are committed to attending overseas

exhibitions, such as Arablab, PICCTON, Analytica Russia, Lab Africa, Analytica Munich, Analytica Latin America, Lab Thailand and etc. Now Drawell already has established business relationships with customers from more than 50 countries, and enjoyed a good reputation through reliable quality, competitive price and good service. Speaking of service, for all cooperated customers, we provide online installation guide, training and operation instructions to our customers. We're also capable of sending our professional engineers to customers' offices or factories to give local support, as our aim is to build and maintain long-term partnerships.

Drawell always warmly welcome your visit!



## | Portable meters









#### **Features**

- 3.5"TFT Color Display, easy to read
- The new UI interface, easy operation
- Intelligent function with Auto. timing datalogger, parameter setting, data holder
- Data storage up to 3000 groups
- Probe constant calibration, standard cond solution calibration
- Power supply: rechargeable lithium battery
- Charging socket: Type-C, in line with the European new regulations.
- Protection class: IP57





# **DOPro10**Optical DO

Accurate, fast and stable reading, no minimum flow rate request, not sensitive to hydrogen sulfide.

#### **Features**

- 3.5" TFT Color Display, easy to read
- A robust POM housing and stainless-steel protective guard ensure durability when measuring in tough environments
- No membranes, no electrolyte, no warm up, minimize hassle
- Fast response (shorter than 15s), fluorescence sensor technology provides high accuracy and repeatability
- Intelligent function with Auto. timing datalogger, parameter setting, data holder
- Built in temperature sensor
- Automatic barometric pressure compensation







## **Specifications-Single parameter**

		Model	PH10	ORP10	EC10	DO10 Polarographic Type	DOPRO10 Optical Type
Parameter		pH/mV.°C	<b>✓</b>	-	-	-	-
		mV(ORP).°C	<b>✓</b>	<b>√</b>	-	-	-
		Cond/TDS/Sal./Res.°C	-	-	<b>√</b>	-	-
		DO	-	-	-	<b>√</b>	<b>√</b>
рН	Measurement range	(-2.000-20.000) pH	✓	-	-	-	-
	Resolution	0.1/0.01/0.001	✓	-	-	-	-
	Accuracy	±0.002pH±one digit	✓	-	-	-	-
	Calibration points	1, 2, -3pts automatic	<b>✓</b>	-	-	-	-
	ATC range	(0.0-100.0) °C/(32.0-212.0)°F	<b>✓</b>	-	-	-	-
	Measurement range	(-1999.9 - +1999.9) mV	✓	<b>√</b>	-	-	-
ORP	Resolution	0.1/1	<b>√</b>	<b>√</b>	-	-	-
	Accuracy	±0.03%F.S±one digit	<b>√</b>	<b>√</b>	-	-	-
Conductivity	Measurement range	0-2000.0mS/cm, auto-ranging: 0-19.999μS/cm; 20.0-199.9μS/cm; 20.0-199.9μS/cm; 20.00-199.9mS/cm; 20.00-199.9mS/cm; 20.00-199.9mS/cm; 20.00-2000mS/cm (K=10)  Match test range: 0-200mS/cm  TDS: 0 - 100.0g/L (TDS factor adjustable)  Resistivity:5.000Ω • cm-100.0MΩ • cm  Salinity: 0-100 ppt	-	-	√	-	-
	Calibration points	one point	-	-	<b>√</b>	-	-
	Resolution	0.001/0.01/0.1/1	-	-	✓	-	-
	ATC range	(0.0-50.0) °C/(32.0-122.0)°F	-	-	✓	-	-
	Accuracy	±0.5 % FS±one digit	-	-	✓	-	-
	Measurement range	(0.00-20.00) mg/L	-	-	-	<b>√</b>	<b>/</b>
	Accuracy	±0.30 mg/L					-
DO		±0.20 mg/L	-	-	-	-	
	DO saturation	(0.0-200.0)%	_	-	_		
	Barometric pressure compensation	(0-200.0) kPa	-	-	-	<b>/</b>	<b>√</b>
	Temperature compensation	(0.0-50.0) °C/(32.0-122.0)°F	-	-	-	<b>√</b>	<b>/</b>
	Salinity compensation	0~45ppt	-	-	-	<b>√</b>	<b>/</b>
	Measurement range	(0.0-100.0) °C/(32.0-212.0)°F	<b>√</b>	<b></b>	<b>√</b>	<b>/</b>	<b>√</b>
Temperature	Accuracy	±0.2°C				<b></b>	
Others	Charging socket	Type-C	<b>√</b>	<b>/</b>	<b>√</b>	<b>/</b>	<b>/</b>
	Power supply	rechargeable lithium battery	<b>√</b>	<b>/</b>	<b>√</b>	<b>/</b>	<b>√</b>
	IP Rating	IP57	<b>√</b>	<b>/</b>			<b>√</b>
		Meter	<b>√</b>	<b>/</b>	<b>√</b>	<b>/</b>	<b>√</b>
		Plastic ATC pH probe 201T-H	<b>√</b>	-	-	-	-
		Plastic ORP probe ORP301	-		-	-	-
		Stainless-steel temperature probe TEMP-02H	-	<b>✓</b>	-	-	-
		Plastic ATC Cond probe CON201T, K=1.0	-	-		-	-
		Polarographic DO probe DO01-2M-H, cable length: 2m	-	-	-		-
		Optical DO probe ODO01-3M, cable length: 3m	_	-	_	-	
Test kit		pH buffer solution: pH4.00/7.00/10.01, 50mL, one for each		-	-	-	-
		Standard ORP solution: 222mV, 50mL,1btl	-		-	-	-
		Standard Cond solution 84µS/1413µS/12.88mS/cm, 50mL, one for each	_	-	<b>✓</b>	-	-
		Membrane refill solution DOS-01, 30mL,1btl	-	-	-	<b>/</b>	-
		Membrane sensor caps DOSC: 3pcs/group, 1pkg	-	-	-	<b>√</b>	-
		Rechargeable lithium battery (pre-installed)				<b>√</b>	
		Charging cable: 1pc	<b>√</b>	<b>√</b>	<b>√</b>	√ ·	<b>√</b>
		Hard carrying case (L/W/H: 33.0×27.2×8.2cm): 1pc	<b>√</b>			<b>√</b>	
		Operation manual					√



## **Specifications-Multiparameter**

Model			PC10	PD10	CD10	PO10	PCD10
Parameter		pH/mV.°C	<b>√</b>		-	<b>√</b>	
		mV(ORP).°C	<b>√</b>		-	<b>√</b>	
		Cond/TDS/Sal./Res.°C	<b>√</b>	-	<b>√</b>	-	<b>√</b>
		DO	-	<b>√</b>	<b>√</b>	-	<b>√</b>
рН	Measurement range	(-2.000-20.000) pH	<b>√</b>	<b>√</b>	-	<b>√</b>	<b>√</b>
	Resolution	0.1/0.01/0.001	<b>√</b>	<b>√</b>	-	<b>√</b>	<b>√</b>
	Accuracy	±0.002pH±one digit	<b>√</b>	<b>√</b>	-	<b>√</b>	<b>√</b>
	Calibration points	1, 2, -3pts automatic	<b>√</b>	<b>√</b>	-	<b>√</b>	<b>√</b>
	ATC range	(0.0-100.0) °C/(32.0-212.0)°F	<b>√</b>	<b>√</b>	-	<b>√</b>	<b>√</b>
ORP	Measurement range	(-1999.9 - +1999.9) mV	<b>√</b>	<b>√</b>	-	<b>√</b>	-
	Resolution	0.1/1	<b>√</b>	<b>√</b>	-	<b>√</b>	-
	Accuracy	±0.03%F.S±one digit	<b>√</b>	<b>√</b>	-	<b>√</b>	-
Conductivity	Measurement range	0-2000.0mS/cm, auto-ranging: 0-19.999μS/cm; 20.0-199.9μS/cm; 200-1999μS/cm; 2.00-19.99mS/cm; 20.00~199.9mS/cm;200.0-2000mS/cm (K=10) Match test range: 0-200mS/cm TDS: 0 - 100.0g/L (TDS factor adjustable) Resistivity: 5.000Ω • cm~100.0MΩ • cm Salinity: 0-100ppt	√	-	√	-	✓
	Calibration points	one point	<b>√</b>	-	<b>√</b>	-	<b>√</b>
	Resolution	0.001/0.01/0.1/1	<b>√</b>	-	<b>√</b>	-	<b>√</b>
	ATC range	(0.0-50.0) °C/(32.0-122.0)°F	<b>√</b>	-	<b>√</b>	-	<b>√</b>
	Accuracy	±0.5 % FS±one digit	<b>√</b>	-	<b>√</b>	-	<b>√</b>
DO	Measurement range	(0.00-20.00) mg/L	-	<b>√</b>	<b>√</b>	-	<b>√</b>
	Accuracy	±0.30 mg/L	-	<b>√</b>	<b>√</b>	-	<b>√</b>
	DO saturation	(0.0-200.0)%	-	<b>√</b>	<b>√</b>	-	<b>√</b>
	Automatic barometri pressure compensation	(0-200.0) kPa	-	<b>√</b>	<b>√</b>	-	<b>√</b>
	Automatic temperature compensation	(0.0-50.0) °C/(32.0-122.0)°F	-	<b>√</b>	<b>√</b>	-	<b>√</b>
	Manual salinity compensation	0~45ppt	-	<b>√</b>	<b>√</b>	-	<b>√</b>
	Measurement range	(0.0-100.0) °C/(32.0-212.0)°F	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Temperature	Accuracy	±0.2°C	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Others	Charging socket	Type-C	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Power supply	rechargeable lithium battery	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	IP Rating	IP57	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>
Test kit		Meter	<b>√</b>	<b>√</b>	✓	✓	✓
		Plastic ATC pH probe 201T-H	<b>√</b>	<b>√</b>	-	✓	<b>√</b>
		Plastic ORP probe ORP301	-	-	-	✓	-
		Stainless-steel temperature probe TEMP-02H	-	-	-	✓	-
		Plastic ATC Cond probe CON201T, K=1.0	<b>√</b>	-	<b>√</b>	-	<b>√</b>
		Polarographic DO probe DO01-2M-H, cable length: 2m	-	<b>√</b>	<b>√</b>	-	<b>√</b>
		pH buffer solution: pH4.00/7.00/10.01, 50mL, one for each	<b>√</b>	<b>√</b>	-	✓	<b>√</b>
		Standard ORP solution: 222mV, 50mL,1btl	-	-	-	✓	-
		Standard Cond solution 84µS/1413µS/12.88mS/cm, 50mL, one for each	<b>√</b>	-	<b>√</b>	-	<b>√</b>
		Membrane refill solution DOS-01, 30mL,1btl	-	✓	✓	-	<b>√</b>
		Membrane sensor caps DOSC: 3pcs/group, 1pkg	-	✓	✓	-	<b>✓</b>
		Rechargeable lithium battery (pre-installed)	<b>√</b>	✓	✓	✓	<b>✓</b>
		Charging cable	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>
		Hard carrying case (L/W/H: 36.0×32.0×9.0cm)	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
		Operation manual	<b>√</b>	✓	✓	✓	<b>✓</b>