

Test Equipment Depot - 800.517.8431 - 5 Commonwealth Ave, MA 01801

TestEquipmentDepot.com



### **Convenient Results at Your Fingertips**

For over a century, OHAUS has perfected the art of measurement through our line of weighing products. Taking a similar approach to our weighing equipment, OHAUS now delivers a line of pen meters that are durable, practical and affordable. Starter pen meters—the portable solution for on-the-go measurement of pH, oxidation-reduction potential (ORP), conductivity, salinity, total dissolved solids (TDS) and dissolved oxygen (DO). Starter pen meters are the economical option when you are simply looking for accurate measurements with no restrictions.

#### **Standard Features Include:**

- Simple Operation in a Slim and Portable Design

  Starter pen meters provide what should be expected of a small pen meter. Simple, fast, straightforward, no-frills yet highly accurate operation time and time again.
- Durably Constructed to Withstand Wear and Tear Resulting from Repetitive Use With durable plastic housing, a protective cap that safeguards the sensor, and an automatic shutdown feature to preserve battery life, the Starter pen meters can endure consistent use in rugged environments.
- Waterproof Housing Protects the Meters in their Working Environment Equipped with a wrist strap that helps to prevent unintentional dropping, Starter pen meters are constructed with an IP67 waterproof design that can prevent water damage when accidentally dropped into liquid.

### **Convenient pH Testing**

Two models with varying resolution and accuracy; the ST10 and ST20 offer a convenient way to measure pH, or the relative acidity or alkalinity of a sample at a given temperature. The pH pen meters can be operated with just one hand, freeing up your other hand to handle samples.

### **pH Meters**

Model	ST20	ST10
Range	0.00 – 14.00	0.0 – 14.0
Resolution	0.01 pH	0.1 pH
Accuracy	0.05 pH	0.1 pH
Temperature Range	0.0 – 99.0 °C	NA
Temperature Compensation	Yes	NA
Display	Dual	Single
Calibration	3 Point	N/A
Buffer Group	4.01, 7.00, 10.01	N/A
Automatic Shutdown	6 Minutes of Non-Use	6 Minutes of Non-Use
Batteries	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline
Size/Weight	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g



#### **Portable ORP Measurement**

ST10R and ST20R can provide measurement of ORP virtually anywhere the need for measurement of the availability of electrons in a liquid exist. Both models provide almost instantaneous results and the ST20R offers the ability to hold the reading right on the display to provide additional time for data logging.

#### **ORP Meters**

Model	ST20R	ST10R
Range	-1000mV – 1000mV	-1000mV – 1000mV
Resolution	1mV	1mV
Accuracy	2mV	2mV
Temperature Range	0.0 - 99.0 °C	N/A
Temperature Compensation	Yes	N/A
Display	Dual	Single
Calibration	N/A	N/A
Automatic Shutdown	6 Minutes of Non-Use	6 Minutes of Non-Use
Batteries	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline
Size/Weight	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g



### **Productive Conductivity Meters**

Starter pen meters are the choice for basic testing needs of the total ionic concentration within a solution. With six models that can measure within three different conductivity ranges, there is a Starter conductivity meter for every application that requires portable operation and quick results.

### **Conductivity Meters**

conductivity meters						
Model	ST20C-C	ST20C-B	ST20C-A			
Range	0.00 – 19.99 mS/cm	0 – 1999 μS/cm	0.0 – 199.9 μS/cm			
Resolution	10 μS/cm	1 μS/cm	0.1 μS/cm			
Accuracy	±1.5 % FS	±1.5 % FS	±1.5 % FS			
ATC	With Temperature Display	With Temperature Display	With Temperature Display			
Display	Dual	Dual	Dual			
Automatic Shutdown	6 Minutes of Non-Use	6 Minutes of Non-Use	6 Minutes of Non-Use			
Batteries	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline			
Size/Weight	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 185 × 45 × 38 mm 110 g 110 g				
Model	ST10C-C	ST10C-B	ST10C-A			
Range	0.00 – 19.99 mS/cm	0 – 1999 μS/cm	0.0 – 199.9 μS/cm			
Resolution	10 μS/cm	1 μS/cm	0.1 μS/cm			
Accuracy	± 2.5 % FS	± 2.5 % FS	± 2.5 % FS			
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10 μS/cm	1 μS/cm	0.1 μS/cm	
± 2.5 % FS	± 2.5 % FS	± 2.5 % FS	
Without Without Temperature Display Temperature Display		Without Temperature Display	
Single	Single	Single	
6 Minutes of Non-Use	6 Minutes of Non-Use	6 Minutes of Non-Use	
4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline	
185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g	
	± 2.5 % FS  Without Temperature Display  Single 6 Minutes of Non-Use  4 AG13 1.5V  Micro Alkaline  185 × 45 × 38 mm,	± 2.5 % FS  Without Temperature Display  Single  6 Minutes of Non-Use  4 AG13 1.5V Micro Alkaline  185 × 45 × 38 mm,  185 × 45 × 38 mm,	

### **Simple Salinity Measurement**

Starter pen meters combine all of the most useful features for measuring salinity in a liquid medium. With the combination of quality construction and sturdy design, Starter pen meters will provide durable operation in even the toughest environments.

**Salinity Meters** 

Dannity Meters						
Model	ST20S	ST10S				
Range	0.0 – 80.0 ppt	0.0 – 10.0 ppt				
Resolution	0.1 ppt 0.1 ppt					
Accuracy	± 1.5 % FS ± 2.5 % FS					
ATC	With Temperature Display Without Temperature I					
Display	Dual Single					
Automatic Shutdown	6 Minutes of Non-Use	6 Minutes of Non-Use				
Batteries	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkalin				
Size/Weight	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g				





#### Multi Parameter Meter

The OHAUS ST20M is a multi parameter pen meter that directly measures pH, conductivity and temperature, as well as provides conversion measurements for TDS and Salinity. These fully waterproof pen meters combine measurement capabilities of two testers in one convenient pocket-sized unit.

Great for water, laboratory or plant use, the ST20M features a single-junction pH electrode and a pin-style conductivity probe for longer usage and durability. The replaceable electrode module saves you money by reusing the meter body. Advanced features include auto-shutoff, low-battery indicator, and simple and easy calibration.

- Measures 5 parameters including pH, Conductivity, TDS, Salinity, and Temperature
- Waterproof rated to IP67
- Automatic Temperature Compensation
- Auto shutoff with low battery indicator
- ST20M meter includes electrode, protective sensor cap, four AG13 1.5V batteries, and wrist strap.

#### ST20M

Model		ST20M-B	ST20M-C		
Measurement	рН	0 -	- 14		
Range	Conductivity	0 1999 μS/cm	0 19.99 mS/cm		
	TDS	0 1000 mg/L	N/A		
	Salinity	N/A	0.0-10.0 ppt		
	Temperature	0 - 9	9.0 ℃		
Resolution	рН	0.0	1 pH		
	Conductivity	1μS/cm	0.01 mS/cm		
	TDS	1 mg/L	NA		
	Salinity	N/A	0.1 ppt		
	Temperature	0.	1 ℃		
Accuracy	рН	± 0.0	05 pH		
	Conductivity	± 2 % F	-ull Scale		
	TDS	± 2 % Full Scale	N/A		
	Salinity	N/A	± 2 % Full Scale		
	Temperature	± 0	± 0.5 °C		
ATC		Yes, with temp	perature display		
ATC Range		0 - 4	0 - 45 °C		
Calibration	рН	3 p	oint		
	Conductivity	1 p	oint		
	TDS	N	I/A		
	Salinity	N	I/A		
IP Grade		IF	IP67		
Dimensions		185 × 45	× 38 mm		
Weight		11	0 g		
Batteries		4 ×	1.5V		
Battery Life		100	hours		
Warranty		1 )	/ear		





# Simple and Fast Dissolved Oxygen (DO) Measurement

The perfect DO meter for every application that requires portable operation and quick results. With IP67 waterproof design and automatic shutdown feature that preserves battery life, the Starter DO meter can endure consistent use in rugged environments.

### **DO Meter**

Model	ST20D
Measurement Range	0.0 – 19.9 mg/L
Resolution	0.1 mg/L
Accuracy	± 0.5 mg/L
Batteries	4 AG13 1.5V Micro Alkaline
Dimension	$185 \times 42 \times 37 \text{ mm}$
Weight	90 g
Auto-off	After 15 Minutes of Inactivity
Auto Temperature Compensation Range	5 to 45 °C (41 to 113 °F)
Materials	ABS



### **Replacement Electrodes**

Item No.	Description	Compatible with
30087992	Electrode, pH10 ST	ST10
30087993	Electrode, pH20 ST	ST20
30087994	Electrode, CT10A ST	ST10C-A, ST10T-A
30087995	Electrode, CT10B ST	ST10C-B, ST10T-B
30087996	Electrode, CS10C ST	ST10C-C, ST10S
30087997	Electrode, CT20A ST	ST20C-A, ST20T-A
30087998	Electrode, CT20B ST	ST20C-B, ST20T-B
30087999	Electrode, CS20C ST	ST20C-C, ST20S
30088020	Electrode, R10 ST	ST10R
30088021	Electrode, R20 ST	ST20R
30222083	Electrode, D20 ST	ST20D
30222084	Membrane & Electrolyte, ST20D	ST20D
30393203	Electrode ST20M-B	ST20M-B
30393204	Electrode, ST20M-C	ST20M-C



### **Complete TDS Meters**

When you need reliable and accurate measurement of TDS, the Starter pen meter offer a great value in a portable and compact design. Bring the Starter TDS Meter wherever your need to measure the combined content of all organic and inorganic substances in a liquid takes you.

### **TDS Meters**

Model	ST20T-B	ST20T-A	ST10T-B	ST10T-A
Range	0–1000 mg/L	0.0-100.0 mg/L	0–1000 mg/L	0.0-100.0 mg/L
Resolution	1 mg/L	0.1 mg/L	1 mg/L	0.1 mg/L
Accuracy	±1.5 % FS	±1.5 % FS	±2.5 % FS	±2.5 % FS
ATC	With Temperature Display	With Temperature Display	Without Temperature Display	Without Temperature Display
Display	Dual	Dual	Single	Single
Automatic Shutdown	6 Minutes of Non-Use	6 Minutes of Non-Use	6 Minutes of Non-Use	6 Minutes of Non-Use
Batteries	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline	4 AG13 1.5V Micro Alkaline
Size/Weight	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g	185 × 45 × 38 mm, 110 g



### Pen Meter Selector Guide

Measuring	Pen Meters					
Parameter	ST10	ST20	ST20M-B	ST20M-C	ST10C	ST20C
рН						
Conductivity				•		•
TDS						
ORP						
Salinity				•		
Resistivity						
DO						
Temperature						

Measuring				Pen Meters			
Parameter	ST10T	ST20T	ST10S	ST20S	ST10R	ST20R	ST20D
рН							
Conductivity							
TDS							
ORP							
Salinity							
Resistivity							
DO							•
Temperature							