

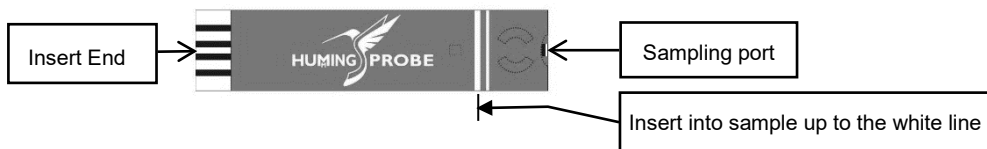
### 1. Product Introduction

- HUMMING PROBE pH test strip electrode UH1 is used together with pH measurement system UX100/UX200, makes pH measurement simple and accurate. The unique features: calibration-free and low sample requirement allow multiple applications feasible.
- UH1 strip electrode, innovatively integrates the principle of electrode measurement on a single test strip electrode for pH measuring. It is easy to operate, calibration not needed, easy to use, convenient to store, carry and use. Measurement can be completed fast and easy.
- HUMMING PROBE pH strip electrode UH1 is manufactured by UltraE Co., Ltd., and sold by authorized dealers. If you have any questions or comments about our products, please call our company or contact your local distributor. We will assist you as soon as possible.
- Product Content:  
 (1). UH1 : pH test strip Electrode  
 (2). User Manual


### 2. Safety Instructions

- Read this user manual before using the Instrument.
- When you suspect the instrument is damaged, do not use it and notify us or your distributor immediately.
- Always store the test Strip Electrode in the vial with cap closed when not in use to guarantee the quality. When using, take the strip electrode out of the vial and close the vial quickly.
- If you have any questions about using the system, please contact us or your dealer.

### 3. UH1: pH Strip Electrode Product Description

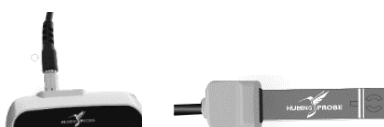



### 4. Measuring pH Process

Choose Cable Socket Mode  or Strip Port Mode  as intended before measurement.

- (1) Take the strip electrode out of the vial and close the vial quickly.


For Cable Socket Mode , Connect the connection cable plug to the socket of the meter and Insert the strip electrode into the adapter of the cable.



- (2) (1) Cable Socket Mode : Immerse the strip sampling port end into the test sample up to the white line of the strip. If you have a CS200 mixer, you can attach and fix the connection cable to the bracket.



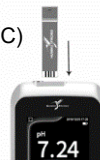
(Fig. A)

- (2) Strip Port Mode : Drop the test sample into the strip sampling port (Fig.A) or immerse the sampling port end into the test sample for 2 seconds (Fig.B), then insert the Strip Insert End into the Meter Strip Port. (Fig.C)

(Fig. B)



(Fig. C)



- (3) Press the Inspect button. 

- (4) When the pH stable state is displayed, the pH measuring is accomplished as displayed on the screen.

**stable !**

## 5. Specifications

Measuring Range :	pH 0 ~ 14
Tolerance :	±0.1 pH
Minimum sample size :	10 ~ 20 µL
Operating temperature :	10° ~ 40°C (show Warning as the temp.<10°C or >40°C)
Dimension (W x Lx T) :	12.6 x 60.0 x 1.0 mm

## 6. Performance

### 6.1 Precision

NIST standard pH buffer (pH)	2	7	12
Sampling quantity	10	10	10
AVG (pH)	1.99	6.99	11.97
SD (pH)	0.01	0.02	0.03
CV (%)	0.75%	0.35%	0.26%
Accuracy Range (pH)	0.05	0.08	0.09

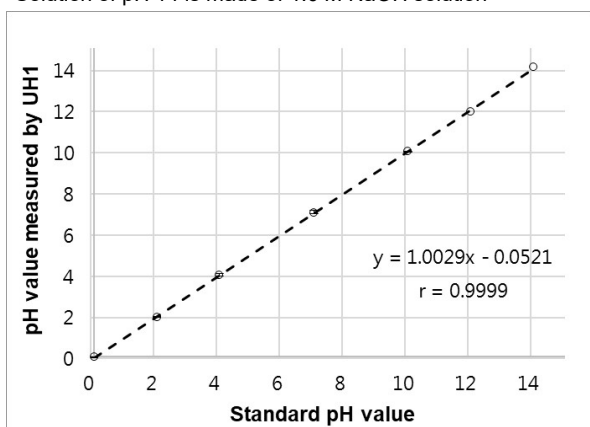
### 6.2 Accuracy

Comparing UH1 measuring value with NIST standard buffer solution, the correlation function are listed below :

UH1 measuring value vs. NIST standard pH Buffer	
Measuring range	pH 0 – 14*
Slope	1.0029
intercept	-0.0521
Correlation coefficient (r)	0.9999

\*Solution of pH 0 is made of 1.0 M HCl solution

\*Solution of pH 14 is made of 1.0 M NaOH solution



## 7. Interfering substances

The following redox substances may affect test results when they are above a specific concentration :

- Vitamin C > 10 µM
- $\text{KMnO}_4$  > 10 µM
- $\text{AgNO}_3$  > 100 µM
- $\text{HClO}$  > 100 µM

## 8. Warranty

- Under proper usage, UltraE provides guarantee for material or manufacturing defects within the valid date shown on cover.
- Please confirm the integrity of the product when purchasing the strip.
- The decision whether or not the guarantee is applicable is subject to UltraE's assessment of the defect cause.