

CWT Soil PH sensor (analog type)

Manual



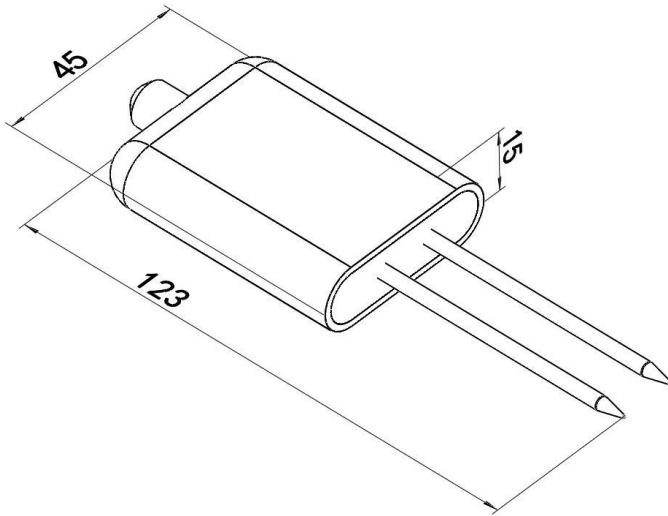
Soil parameters measuring

PH	<ul style="list-style-type: none"> Measuring range: 3-9 PH Accuracy: ± 0.3PH Resolution: 0.1 Long-term stability: $\leq 5\%$/year Response time: ≤ 10S
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Basic parameters

Power supply	4-20mA/0-5V type: DC4.5-30V 0-10V type: DC18-30V
Max Power consumption	0.5W@24V DC
Protection class	IP68, long-term immersion in water use
Cable length	2M
Operating environment	-40°C-80°C
Overall dimensions	45 * 15 * 123mm
Output signal	Current output: 4-20mA
	Voltage output: 0-5V/0-10V
Load capacity	Current output: $\leq 600 \Omega$
	Voltage output: resistance $\leq 250 \Omega$

Size



Wiring

Cable color	description
Brown	Power + (DC5-30V)
black	Power -
yellow	Analog output +
blue	Analog output -

Output signal calculation

PH measuring range is 3~9PH,

4-20mA output:

formula:

measuring PH value= $((9-3)/(20-4)*(current\ value-4mA))+3$

0-5V output:

formula:

measuring PH value= $((9-3)/(5-0)*current\ value)+3$

0-10V output:

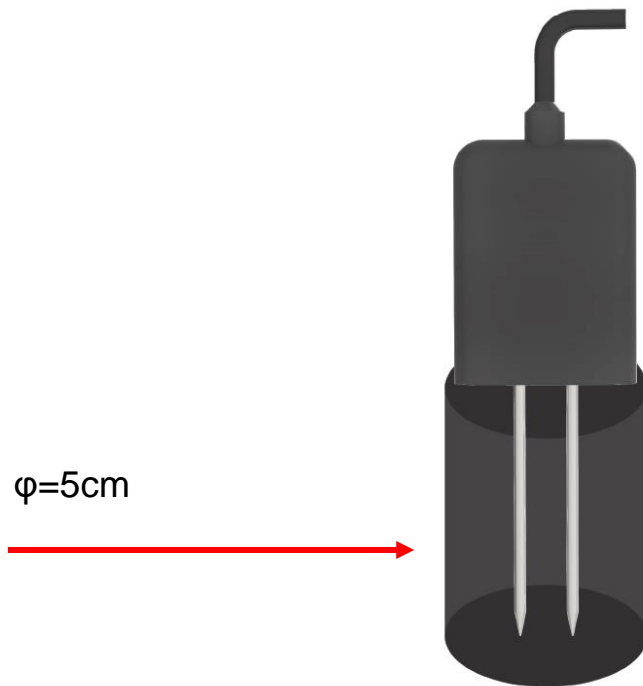
formula:

measuring PH value= $((9-3)/(10-0)*current\ value)+3$

E.g., current value is 12mA.

measuring PH value= $((6/16)*(12-4))+3=6$

Measuring range



Installation

