

CWT Soil PH sensor (analog type) Manual



Soil parameters measuring

PH	Measuring range: 3-9 PH
	Accuracy: ±0.3PH
	Resolution: 0.1
	Long-term stability: ≤5%/year
	Response time: ≤10S

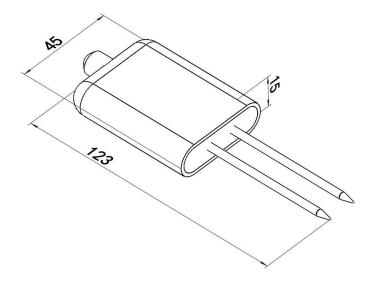
Basic parameters

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℃-80℃	
Overall dimensions	45 * 15 * 123mm	
Output signal	Current output: 4-20mA	
	Voltage output: 0-5V/0-10V	
Load capacity	Current output: ≤600 Ω	
	Voltage output: resistance \leq 250 Ω	

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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

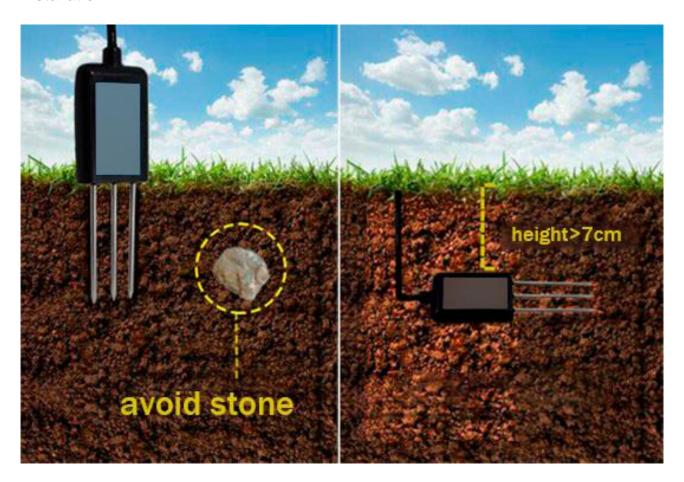
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Measuring range



Installation



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