
SPA- Alkalinity-T01 Total Alkalinity Analyzer

Datasheet

Product overview

SPA-Alkalinity-T01 is an on-line total alkalinity analyzer that measures the total alkalinity of water using titration and colorimetric methods. It automatically pumps reagents into the water sample for reaction, determines the reaction endpoint via colorimetry, and then calculates the total alkalinity based on the consumed reagent volume. By selecting different reagents, the analyzer can measure various types of total alkalinity.



Application

- Drinking water
- Raw water
- Boiler water
- Cooling water

Features

- Accurate and reliable fully automatic hardness analyzer.
- With self-diagnosis, abnormal alarm, data exceeding the standard alarm function
- Interval measurement optional, minimum 5min
- Supports Modbus RS485 and 4-20mA signal outputs
- Support 4G, WiFi wireless data transmission



Specifications

Specifications are subject to change without notice.

Specification	Detail
Parameter	Total Alkalinity
Measurement method	Titrimetric colorimetric method
Range	5.34-2050 mg/L(ppm) CaCO ₃ (see reagent type)
Accuracy	±5 % of the upper measured value of the respective reagent used
Repeatability	±5 % of the upper measured value of the respective reagent used
Dimension(H x W x D)	300×300×180 mm (11.81×11.81×7.09 inch)
Weight	Approx. 4 kg
Power requirements	100-240 VAC, 50/60 Hz
Power consumption	25 W
Operating temperature	5 - 45 °C (41 - 113 °F)
Storage temperature	5 - 45 °C (41 - 113 °F)
Protection class	IP54
Humidity	20 % - 95 %, indoor installation
Cable length	6 m (6.56 ft), Please contact us for other sizes
Tubing requirements	Inlet/Outlet: 6 mm outer diameter
Pressure	0.2 - 2 bar
Communication Interface	Modbus RS485
Analogue output	0/4 – 20 mA Resolution: < 100 µA max. load: 750 Ω
Signal input	One electrically input (for start analysis/ flow switch)
Relay output	Two relays (max. 250 VAC / 30 VDC 3A)
Wireless communication	WiFi / 4G (optional Configurations)
Data storage	32 GB SD card
Warranty period	One year

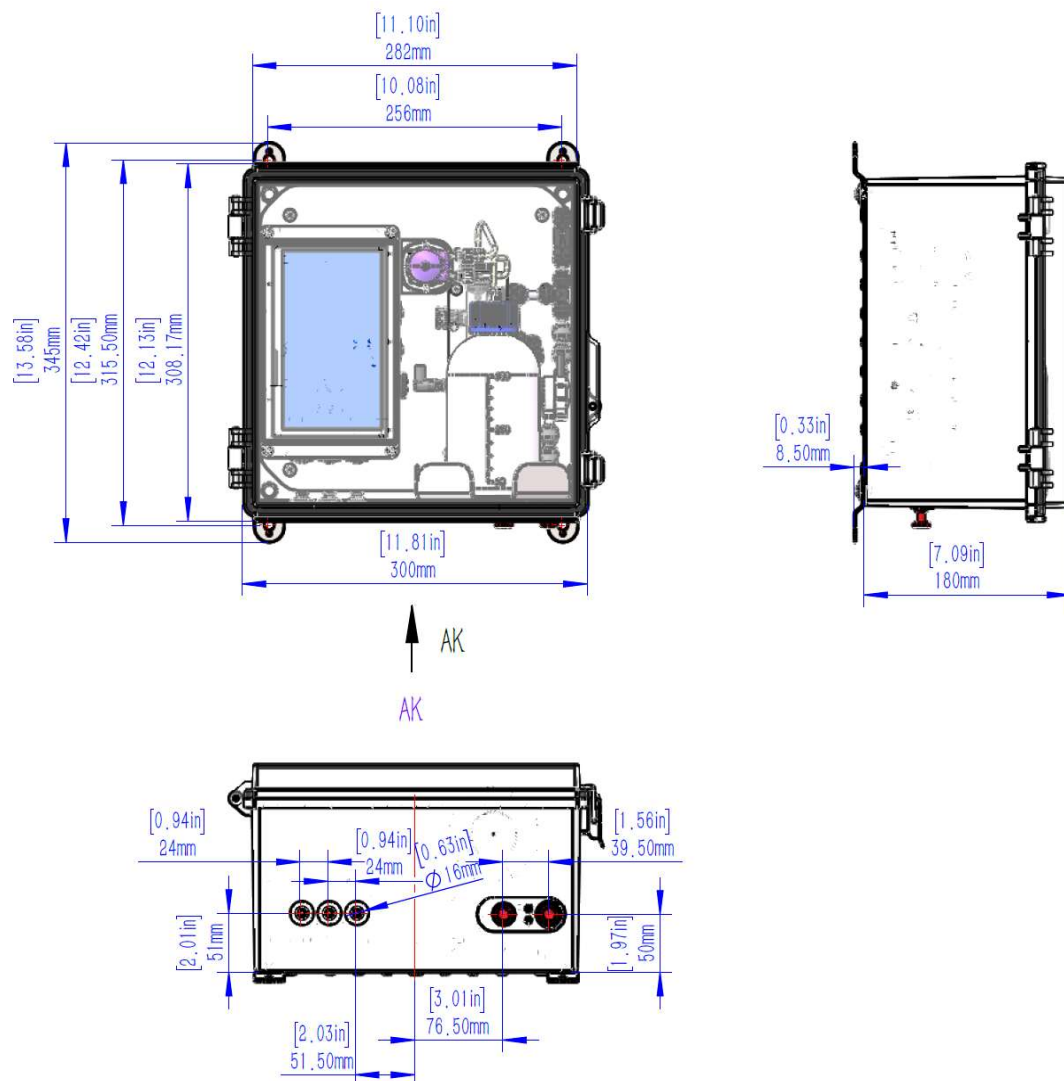
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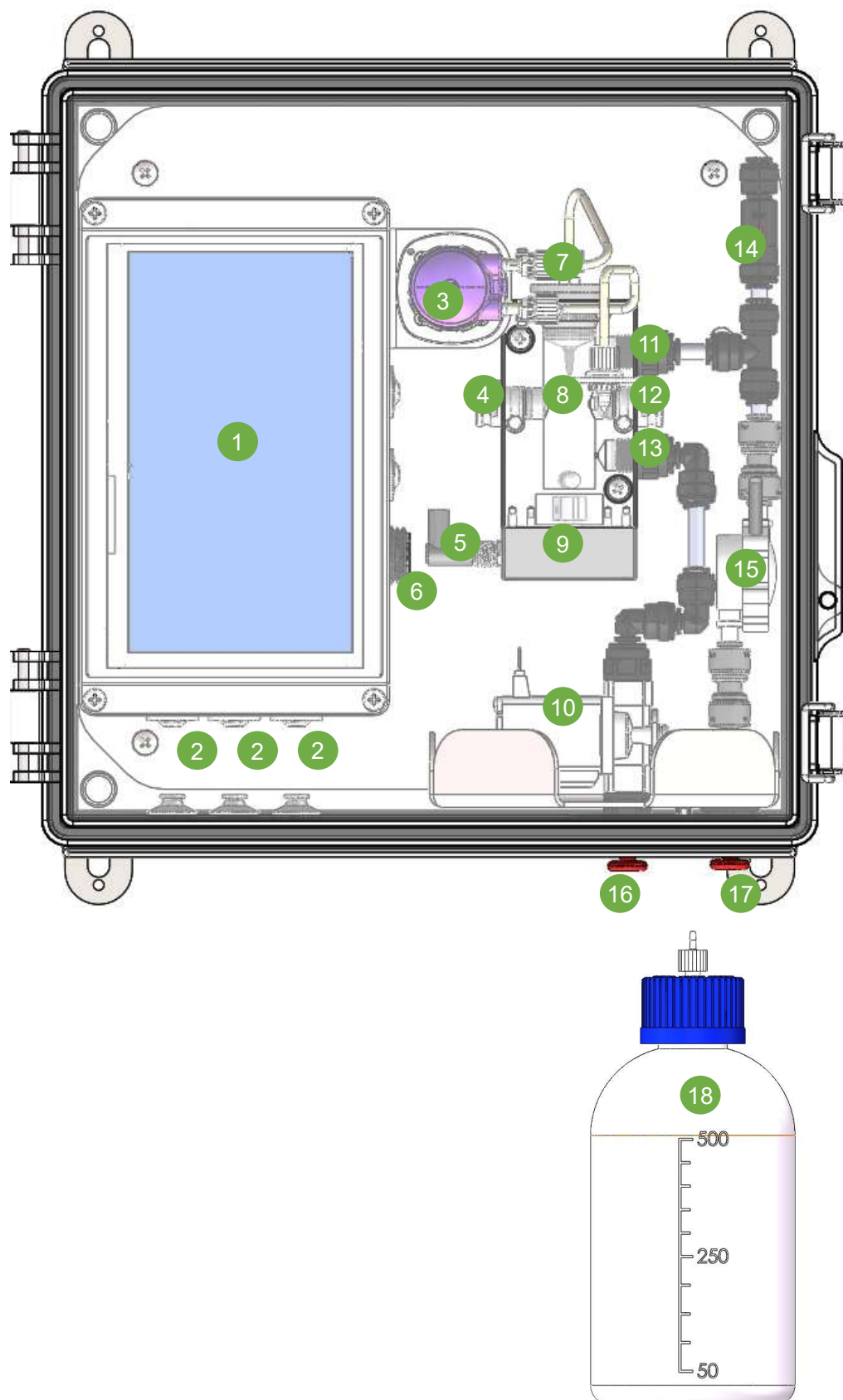
Reagent range

No.	Reagent type	mg/L(ppm) CaCO ₃	mmol/L
6401	WAR-Alkalinity-T01	5.34-134	0.107-2.68
6402	WAR-Alkalinity-T02	8.01-205	0.160-4.10
6403	WAR-Alkalinity-T03	10.7-267	0.214-5.34
6404	WAR-Alkalinity-T04	16.0-401	0.32-8.02
6405	WAR-Alkalinity-T05	80.1-2050	0.160-41

Dimensions



Structural components



No.	Description	No.	Description
1	Controller	2	Cable threading holes
3	Dosing pump	4	Optical receiver
5	Cable of magnetic agitator	6	On/off switch
7	Dosing plugs (reagent plugs)	8	Measurement chamber
9	Magnetic agitator	10	Solenoid
11	Measurement chamber outlet	12	Light source
13	Measurement chamber inlet	14	Ventilation check valve
15	Flow meter	16	Water inlet (6 mm tube)
17	Water outlet (6 mm tube)	18	Reagent bottle (500mL)

Accessory package

No.	CN	Name	Model	Quantity
SPZL003160	A	Peristaltic pump head + Peristaltic pump tubing	SPA- Alkalinity	1
	E	Bottle cap GL32	PBT, GL32, openable cap	1
	H	Solenoid valve	VX212MYXNB	1
	I	6 mm water tube	PE-0604-N (6mm) 36mm×3pcs 43mm×1pcs 56mm×1pcs	1
	J	Pneumatic joint	PG1/4-6	2
	K	Flow sensor	OKD-HZ06K (0.15-1.5L/min)	1
	L	Bulkhead connector	PM1206E	1
	M	Equal tee	PM0206E	1
	N	Stem elbow 90°	PM220606E	3
	O	Single check valve	6SCV	1
	R	Straight adaptor	PM010612E	2



Accessories and consumables

