

ST802 Series Anemometer

Instruction Manual

ST802 series anemometers are used in applications as ventilation outlets to measure the air speed, humidity, temperature and air flow.

1. Safety

Please read this instruction manual thoroughly and carefully before put it into use and Keep this manual for later reference.

2. Avoid personal injury/damage to equipment




- 2.1 Only operate the measuring instrument properly, for its intended purpose and within the parameters specified in the technical data. Do not use force.
- 2.2 Never store the product together with solvents, acids or other aggressive substances.
- 2.3 Only carry out the maintenance and repair work that is described in the manual. Follow the prescribed steps when doing so. Use only the spare parts from the original manufacturer.

3. Protecting the environment

- 3.1 Take the spent batteries to the collection points.
- 3.2 Send the product back to the manufacturer at the end of its useful life. We will ensure that it is disposed of in an environmentally friendly manner.



4. Basic settings

Preset the below parameters before taking measurement :
 Unit of temperature: °C, °F
 Unit of humidity: %RH, td(dew point), WB (wet bulb)
 Unit of velocity: m/s, km/h, fpm, mph, kts, Bft
 Flow unit:ft²,m²,m³/s,CFM
 Switch the device off: Manually or Automatically
 (automatically goes off if no key is pressed for 10 minutes)

Device on > Long press  enter the setting mode.
 Press  several times until the desired unit flashes.
 Press  to confirm.
 Switch into measuring mode after the setting is done, the setting is invalid if the device is turned off under the setting mode.

5. Operation instruction





To ensure correct measurements, please follow the notes below
 Position instrument so that flow impacts at the rear
 Keep temperature and humidity sources which may falsify the measurement (e.g. hands) away from the sensor.


Switch on :Press 
 Switch the back light on : Device on > press . The display light goes off automatically if no key is pressed for 10 seconds.

Adjustable parameters:


ST8020:Device on >press  to switch between temperature and wind chill measurement.

ST8021:Device on >press  to switch among temperature, humidity> temperature , dew point and wind chill measurement.

ST8022:Device on > press , setting the acreage for flow measurement, **8888** indicated on the display. use  to set every digit of the desired acreage,confirm the setting by press , and back to the air speed and flow measurement mode,long press , back to air speed and temperature measurement mode.

Changing the display view:
 Long press , the following readings displayed one by one : Hold > Max value > Min value > Avg value . Those data will not be recorded after the device is switched off..

6. Maintaining the product

Battery replacement: change new batteries as soon as possible when the low voltage  indicator displayed.
 Use only batteries of 1.5 V AAA . Observe the polarity.
 Hi and Lo indicate the measurement is out of range .

Please contact the distributor for further question .

7. Specifications

Model NO.	ST8020	ST8021	ST8022
Sensor	Air speed:plastic impeller (ϕ30mm)		
	Temp:NTC temperature sensor		
	—————	Relative Humidity Sensor	—————
Parameters	m/s,km/h,fpm,kts,Bft °F,°C,wind chill	m/s,km/h,fpm,kts,Bft °F,°C,wind chill,%RH wet bulb,td	m/s,km/h,fpm,kts,Bft °F,°C, CFM,m ³ /s
Range	Air speed:0.4 ~ 20m/s 80 ~ 4000fpm Temp:-10 ~ 50 °C +14 ~ 122°F	Air speed:0.4 ~ 20m/s 80 ~ 4000fpm Temp.: -10~50 °C +14 ~ 122°F Humidity:5% ~ 95%RH	Air Speed:0.4 ~ 20m/s 80 ~ 4000fpm Temp.: -10 ~ 50 °C +14 ~ 122°F Flow:0~ 99999 CFM
Resolution	0.1m/s;0.1°C/°F	0.1m/s;0.1°C/°F;0.1%RH	0.1m/s;0.1°C/°F;0.1CFM
Accuracy	± (2% reading+0.2m/s) ± (2% reading+40fpm) ± 0.5°C;± 0.9°F	± (2% reading+0.2m/s) ± (2% reading+40fpm) ± 0.5°C;± 0.9°F;± 4%RH	± (2% reading+0.2m/s) ± (2% reading+40fpm) ± 0.5°C;± 0.9°F
Sampling rate	0.5s		
Protection class	Ip30		
Ambient Temp.	-10 ~ 50°C;+14 ~ 122°F		
Storage/transport conditions	-20 ~ 70°C;-4 ~ +158°F		
Power supply	3 x1.5V AAA (LR03)		
Battery life	300 h (without display light)		
Size	145 x 52 x 25mm		
Weight	145g		
Standard accessory	Instruction Manual,batteries (AAAx3)		