

... Your Partner for weather conditions Monitoring

## WHO WE ARE

3E is an International Engineering Company specialized in the fields of energy and environment, having an experience of more than 15 years.

## WHAT WE DO

3E provides a tailored environmental monitoring consultancy service to both private and public sectors.

Our mission is to provide clients across Qatar and Gulf countries with essential air quality and noise measurement, dispersion modeling, and pollution control project management for all types of industry and construction sites, from planning through to completion, with a highly skilled professional team working together, using common sense and practical experience.

## OUR COMMITMENT TO YOU

We are committed to use the highest quality instruments that give you the most accurate and reliable results.

## AMONG OUR REFERENCES

- Doha Metro Gold Line
- AL WAKRAH Stadium Early works Package
- Animal Containment center in Rawdhat Al Faras



## AMONG OUR CUSTOMERS



## OUR INSTRUMENTS FOR WEATHER MONITORING

- ❖ Vaisala Weather Transmitter WXT520
- ✓ Measures 6 most essential weather parameters.
- ✓ Accurate and stable.
- ✓ Low power consumption.
- ✓ Easy to install.
- ✓ Vaisala Configuration Tool for pc
- ✓ Applications: weather stations, dense networks, harbors, marinas.

# Technical Data

## Wind

Speed	
range	0 ... 60 m/s
response time	250 ms
accuracy	
0 ... 35 m/s	±0.3 m/s or ±3%, whichever is greater
35 m/s ... 60 m/s	±5%
output resolutions and units	0.1 m/s, 0.1 km/h, 0.1 mph, 0.1 knots
Direction	
azimuth	0 ... 360°
response time	250 ms
accuracy	±3°
output resolution and unit	1°

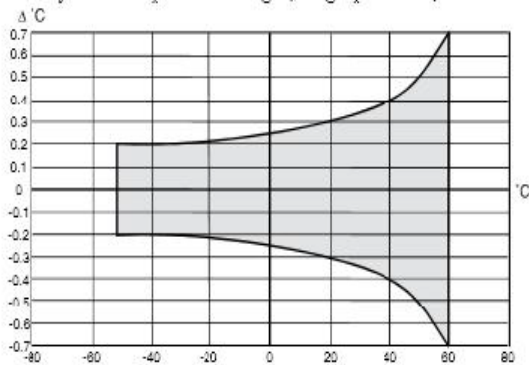
## Liquid precipitation

<b>Rainfall</b>	cumulative accumulation after the latest automatic or manual reset
output resolutions and units	0.01 mm, 0.001 inches
accuracy	5%*
<b>Rainfall duration</b>	counting each ten-second increment whenever water droplet is detected
output resolution and unit	10 s
<b>Rain intensity</b>	one-minute running average in ten-second steps
range	0 ... 200 mm/h (broader range with reduced accuracy)
output resolutions and units	0.1 mm/h, 0.01 inches/h
<b>Hail</b>	cumulative amount of hits against the collecting surface
output resolutions and units	0.1 hits/cm <sup>2</sup> , 0.01 hits/in <sup>2</sup> , 1 hits
<b>Hail duration</b>	counting each ten-second increment whenever hailstone is detected
output resolution and unit	10 s
<b>Hail intensity</b>	one-minute running average in ten-second steps
output resolutions and units	0.1 hits/cm <sup>2</sup> h, 1 hits/in <sup>2</sup> h, 1 hits/h

\* Due to the nature of the phenomenon, deviations caused by spatial variations may exist in precipitation readings, especially in a short time scale. The accuracy specification does not include possible wind induced errors.

## Air temperature

Range	-52 ... +60 °C (-60 ... +140 °F)
Accuracy for sensor at +20 °C	±0.3 °C (±0.5 °F)
Accuracy over temperature range (see graph below)	



Output resolutions and units 0.1 °C, 0.1 °F

## Barometric pressure

Range	600 ... 1100 hPa
Accuracy	±0.5 hPa at 0 ... +30 °C (+32 ... +86 °F) ±1 hPa at -52 ... +60 °C (-60 ... +140 °F)
Output resolutions and units	0.1 hPa, 10 Pa, 0.0001 bar, 0.1 mmHg, 0.01 inHg

## Relative humidity

Range	0 ... 100 %RH
Accuracy	±3 %RH within 0 ... 90 %RH ±5 %RH within 90 ... 100 %RH
Output resolution and unit	0.1 %RH

## General

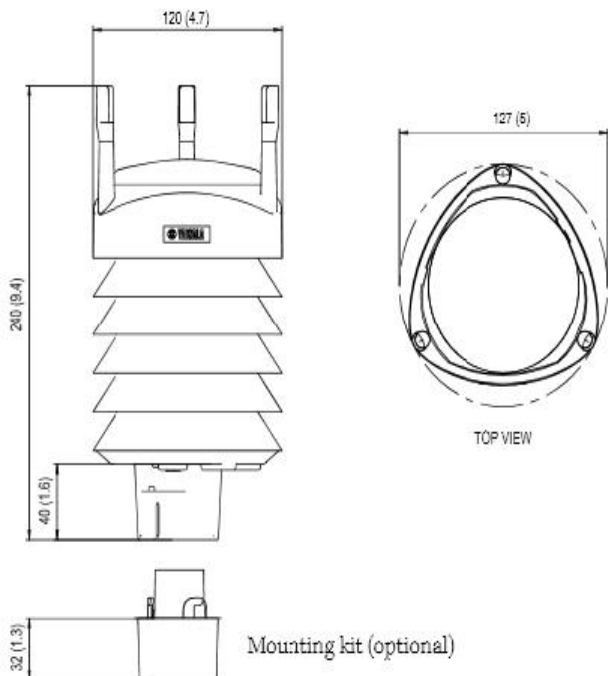
Operating temperature	-52 ... +60 °C (-60 ... +140 °F)
Storage temperature	-60 ... +70 °C (-76 ... +158 °F)
Operating voltage	5 ... 32 VDC
Typical power consumption	3 mA at 12 VDC (with defaults)
Heating voltage	5 ... 32 VDC (or AC, max. 30 V <sub>RMS</sub> )
Serial data interface	SDI-12, RS-232, RS-485, RS-422, USB connection
Weight	650 g (1.43 lb)
Housing	IP65
Housing with mounting kit	IP66

## Electromagnetic compatibility

Complies with EMC standard EN61326-1; Industrial Environment  
IEC standards IEC 60945/61000-4-2 ... 61000-4-6

## Dimensions

Dimension in mm (inches)



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