

Weather Station WXT

for NoiseScout



Vaisala WXT536 weather station

Overview

Rain, strong wind and the wind direction can influence the outdoor sound pressure level to be measured. Connect a weather station to your noise measurement station to simultaneously record the noise level and the weather data. Depending on the weather station model used, air pressure, temperature, air humidity, rain, hail, wind speed and wind direction are documented. NoiseScout supports the Vaisala models WXT532, WXT533 and WXT536.

Measurements

- Wind speed & direction
- Rainfall or hail
- Air pressure
- Humidity
- Temperature

Key features

- Low power consumption (3.5 mA typ.)
- 1 minute logging interval
- Configured for operation with XL3 or XL2+NetBox

Application

- Weather data collection in combination with environmental noise monitoring (outdoor).
- Customized noise analysis with the Data Explorer PC-software, by excluding e.g. periods of strong wind or heavy rain from the acquired data.

Specifications Weather Station WXT

Wind speed observation range accuracy output resolution measurement unit	0 ... 60 m/s (134 mph) ±3 % @ 10 m/s (22 mph) 0.1 m/s m/s, mph
Wind direction azimuth accuracy output resolution averaging time	0 ... 360° ±3.0° @ 10 m/s (22 mph) 1° 1 ... 3'600 s, sample rate 1, 2, 4 Hz
Rain intensity output resolution field accuracy	0.1 mm/h (0.01 in/h) better than 5 %, weather-dependent
Hail intensity output resolution	0.1 hits/cm ² h (1 hits/in ² h)
Barometric pressure observation range accuracy @ 600 ... 1'100 hPa	500 ... 1'100 hPa ±0.5 hPa @ 0 ... +30 °C (+32 ... +86 °F) ±1 hPa @ -52 ... +60 °C (-60 ... +140 °F)
Air temperature observation range accuracy @ +20 °C (+68 °F)	-52 ... +60 °C (-60 ... +140 °F) ±0.3 °C (±0.54 °F)
Relative humidity observation range accuracy	0 ... 100 %RH ±3 %RH @ 0 ... 90 %RH ±5 %RH @ 90 ... 100 %RH
Weight WXT532, WXT533 WXT536	0.5 kg (1.1 lb) 0.7 kg (1.54 lb)
Operating conditions Temperature Humidity Air pressure Wind	-52 ... +60 °C (-60 ... +140 °F) 0 ... 100 % RH 500 ... 1'100 hPa 0 ... 60 m/s (0 ... 134 mph)
Storage	-60 ... +70 °C (-76 ... +158 °F)
IP rating	IP65 without / IP66 with mounting kit
Power Supply operating voltage power consumption	6 ... 24 VDC (-10 ... + 30 %) min. 0.1 mA @ 12 VDC typ. 3.5 mA @ 12 VDC max. 15 mA @ 6 VDC
Compliance EMC compatibility environmental compliance marks	EN 61326-1, industrial environment / CISPR 32 / EN 55032, Class B IEC 60068-2-1, 2, 6, 14, 30, 31, 78 / IEC 60529, VDA 621-415 CE, RCM, RoHS, China RoHS, UKCA
Features	<ul style="list-style-type: none"> • WXT532: wind speed, wind direction • WXT533: wind speed, wind direction, rainfall, hail • WXT536: wind speed, wind direction, rainfall, hail, temperature, air pressure, humidity
Accessories included	<ul style="list-style-type: none"> • USB cable 1.4 m • USB extension 10 m • pole mounting kit • bird protection
Order Information	<ul style="list-style-type: none"> • WXT532: NTi Audio # 600 000 736 • WXT533: NTi Audio # 600 000 737 • WXT536: NTi Audio # 600 000 738 • Over-voltage protection: NTi Audio # 600 000 739

All information subject to change without notice.