

WXT520

multi-parameter weather sensor

- *Measures six weather parameters*
- *No moving parts*
- *Compact & lightweight sensor*
- *IP-66 water-resistant housing*
- *Low power consumption*

The **WXT520** multi-parameter weather sensor simultaneously measures wind speed and direction, liquid precipitation, barometric pressure, temperature, and relative humidity with an unparalleled combination of performance and value. The sensor consumes little power and has no moving parts, making it ideal for remote weather stations. A number of options are available, including a heated version, bird deterrent kit, USB service cable, lightning surge protector, and M12 cable connector assembly.

All measurements are based on proven Vaisala technology, including the PTU module for barometric pressure, temperature, and humidity; the WINDCAP sensor for wind speed and direction; and the RAINCAP sensor for rainfall, rain intensity, and duration. The precipitation measurement detects the impact of individual rain drops, which is proportional to the volume of the drops. The signal from each drop is converted directly to the accumulated rainfall.

The **WXT520** housing with mounting kit is water-resistant to IP66, completely protecting the internal components from dust and low-pressure jets of water. The sensor includes an SDI-12 output for interfacing with NexSens **iSIC** and **SDL** data loggers. Data collection options include direct-connect, landline phone, cellular, radio, Ethernet, WI-FI, and satellite telemetry. NexSens **iChart** Software is a Windows-based program for interfacing both locally (direct-connect) and remotely (through telemetry) to a NexSens data logger or network of data loggers.

NEXSENS
technology

WXT520

multi-parameter weather sensor

specifications

Wind Speed Range	0-60 m/s
Wind Speed Accuracy	±0.3 m/s or ±3% at 0 to 35 m/s, whichever is greater; ±5% at 35 to 60 m/s
Wind Direction Azimuth	0-360°
Wind Direction Accuracy	±3°
Precipitation Collecting Area	60 cm ²
Rainfall Accuracy	5%
Pressure Range	600-1100 hPa
Pressure Accuracy	±0.5 hPa at 0 to 30°C; ±1 hPa at -52 to +60°C
Humidity Range	0 to 100% RH
Humidity Accuracy	±3% RH at 0 to 90% RH; ±5% RH at 90 to 100% RH
Temperature Range	-52 to +60°C
Temperature Accuracy	±0.3°C (at 20°C)
Operating Voltage	5 to 32 VDC
Typical Power Draw	3mA at 12 VDC
Weight	1.43 lb.
Dimensions	9.4" Height x 4.7" Diameter



parts list

Part #	Description
WXT520AAA0AA00B0	WXT520 multi-parameter weather sensor, SDI-12
WXT520AAA0BA00B0	WXT520 multi-parameter weather sensor with M12 male connector, SDI-12
WXT520AAA1AA00B0	Heated WXT520 multi-parameter weather sensor, SDI-12
WXT520AAA1BA00B0	Heated WXT520 multi-parameter weather sensor with M12 male connector, SDI-12
C8P-24-P	Cable, 8 conductor, PVC jacket, 24 AWG, priced per ft.
212416	8-pin M12 female terminal block connector
212792	Mounting kit, adapts to 3/4" pipe (improves classification from IP65 to IP66)
WXT510-M	Mounting kit for Vaisala WXT & WMT sensors, 2" female NPT
212793	Bird spike kit
220614	Service Pack 2: Vaisala Configuration Tool for Windows, USB Service cable
WSP150	Surge protector for Vaisala ultrasonic wind sensors
3100-MAST	Mast-mounted 3100-iSIC data logging system with cellular modem telemetry
4100-MAST	Mast-mounted 4100-iSIC data logging system with spread spectrum radio telemetry
6100-MAST	Mast-mounted 6100-iSIC data logging system with Iridium satellite telemetry
1001	iChart 6 software, licensed per computer



937.426.2703
8am to 7pm EST, Monday-Friday

937.426.1125
24 hours a day, every day

NexSens Technology, Inc.
PO Box 151
Alpha, OH 45301-0151

E info@nexsens.com

→ nexsens.com