clarity

Wind Module Technical Specifications
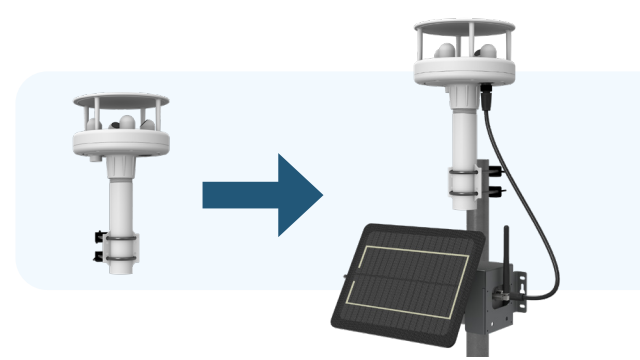
AIR QUALITY MEASUREMENTS

PARAMETER	TECHNOLOGY	RANGE	PERFORMANCE
Wind Speed	Solid-state 2-axis ultrasonic wind sensor	Range: 0 to 60.00 m/s Resolution: 0.01 m/s	Accuracy: ± 2% (at 12m/s)
Wind Direction	Solid-state 2-axis ultrasonic wind sensor	Range: 0 to 359.9° Resolution: 0.1°	Accuracy: ± 3° (at 12m/s)
Atmospheric Pressure	–	300 to 1100 hPa Resolution: 0.02 hPa	Relative Accuracy: ± 0.12 hPa
Ambient Temperature	–	Range: - 20° C to 75° C Resolution: 0.1° C	Accuracy: ± 0.5° C
Ambient Relative Humidity	–	10% to 99.9% RH Resolution: 0.1% RH	Accuracy: ± 2% RH (at 25° C)

DATA FLOW

Measurement Frequency (Adjustable)	- Default: Once every 15 minutes - Sampling synchronized with Node-S to occur simultaneously with air pollutant measurements; **see Node-S specifications for details**
Data Retrieval from Cloud	- Clarity Dashboard (Web App) - RESTful APIs (Programmatic Access)
Device to Cloud Communication	Connectivity provided by Clarity Node-S (SIM card and service included)

POWER[1]

| Solar-Powered via Clarity Node-S	Wind Module self-powered via solar panel of companion Node-S device[1]

MOUNTING & DEPLOYMENT

Connect to Node-S	Plug module into Clarity Node; Node will reset and automatically recognize the module
Sensor Siting	- Install sensor in an open area with unobstructed air flow - Align to true north
Mounting	Use the manufacturer-provided mounting bracket to affix to a pole or another secure foundation

OPERATING CONDITIONS

Weatherproof Rating	IP65
UV Exposure	UV-stabilised ABS plastic
Absolute temperature	-40° to 80° C
Operating temperature	**See Node-S specifications**
Operating humidity	**See Node-S specifications**

DIMENSIONS

Total (Assembled)	180 mm (Diameter) x 303 mm (H)
Sensor	180 mm (Diameter) x 146 mm (H)
Mount Shaft	40mm (Diameter) x 158 mm (H)
Total Weight	< .5 kg / 1.10 lb

├ **180 mm** ┤

303 mm
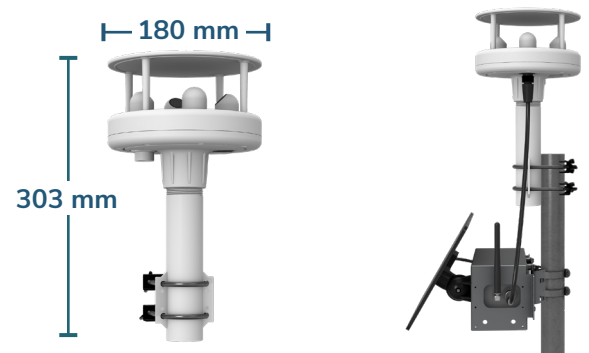
[1] The Node-S can support Wind Module power requirements with a natively-integrated solar panel at default sampling rate.

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