Clarity **2010** Unlock FEMgrade ozone measurements

The Clarity Ozone Module is based on best-in-class technology from 2B Technologies, and provides highly accurate measurements of ozone down to a few parts per billion by volume (ppb) using the well-established measurement technique of absorption of ultraviolet light at 254 nm.



POWER REQUIRED

Ozone Module is powered through the companion Node-S, which needs to be plugged into an outlet when paired with Ozone Module.



FEM-GRADE 0-40°C

Approved by the U.S. EPA as a modification of Federal Equivalent Method (FEM): EQOA-0914-218.

SEAMLESS INSTALL

Clarity 28TECH

Sensing-as-a-Service

Air Quality Monitoring

Clarity

€ clarity

Ozone

Accurate Air Quality Data at Scale

Accessory Modules

Integrates seamlessly into existing Clarity Node-S networks, with device management and data visualization through the Clarity dashboard.

Paired 3 (50%)

clarity

Ozone Module Technical Specifications



AIR QUALITY MEASUREMENTS

PARAMETER	TECHNOLOGY	RANGE	ACCURACY
FEM-Grade Ozone Concentration (ppb)	UV Absorption at 254 nm,	Range: 0-500 ppb	< 75 ppb: 1.5 ppb
	single beam	Resolution: 0.1 ppb	>= 75 ppb: 2% of measured value

DATA FLOW

Measurement Frequency (Adjustable)	 Default: Once every approximately 15 minutes Sampling synchronized with Node-S to occur simultaneously with other 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 at no additional cost	

OPERATING CONDITIONS

Operating temperature	0 – 50° C (00 – 40° C for FEM)
Flow Rate Limits (volumetric)	Minimum: 0.6 Liter/min; Nominal: 1 Liter/min; Maximum: 1.5 Liter/min
Temperature and pressure corrected	Yes
Calibration	NIST traceable, biennial recalibration recommended

POWER

Externally Powered	- Ozone Module is powered through the	
	companion Node-S, which needs to be	
Electrical Power Required	plugged into an outlet when paired with	
	Ozone Module. Not solar-powered.	
Power Consumption	<6W (companion Node-S power	
	consumption not included)	

DIMENSIONS

	Dimensions	33.5 cm (H) \times 27.4 cm (W) \times 13.3 cm (D)
	Weight	8.7 lb (3.94 kg)
33	B.5 cm	coro-device" y Montoing

MOUNTING & DEPLOYMENT

Connect to Node	Plug module into Clarity Node-S; Node-S will reset and automatically recognize the module
Ozone Module Siting	Install device in an open area with unobstructed air flow where ambient O ³ concentration can be evaluated — see our <u>siting guide for more info</u>
Mounting	Use provided mounting brackets to affix to a pole or another secure foundation