

SiteBox

**Portable
water quality
monitoring and
control system.**

Introducing ATI's pioneering breakthrough in water quality control, the SiteBox is a brand-new approach to water quality monitoring systems.

SiteBox is a fully independent portable monitoring, control and policing system that can be used in many applications from drinking water treatment (raw, treated and final water) to process water in food industry, in a carry-on luggage sized box. Its modular nature enables users to order a bespoke monitoring system that fits individual site requirements. This is in stark contrast to the size and complexity of traditional panel mounted solutions.

SiteBox can be used on its own as the input to a control system, or alternatively as an independent monitoring system that polices existing water quality monitors.



Delivery to start up in minutes

SiteBox is quick to install, with delivery to start up in minutes and receiving live data within an hour. The system also has a tiny footprint, low water usage and can also be configured for dual validation, triple validation and multi-stream, with up to eight sensors and over 20 parameters to choose from.

Offering a sustainable solution to water quality monitoring, SiteBox will ultimately help drive down complaints, increase SIM scores and result in safeguarding water quality for customer use.

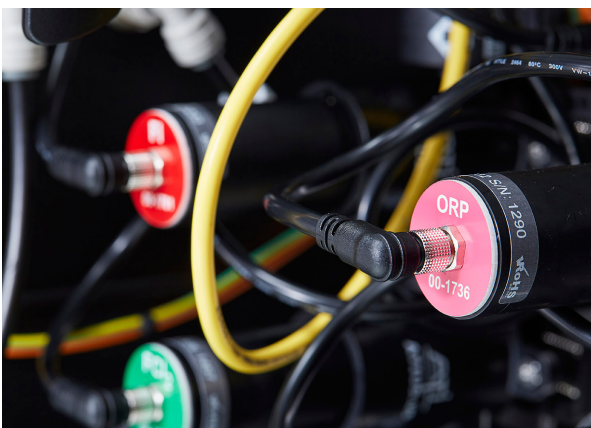
Applications include

Service reservoir inspections and cleaning
Final water verification
Water treatment and resilience planning
Investigatory work
Hospitals and healthcare
Pharmaceutical
Events, conferences and festivals
Food and beverage processing operations

plus many more. Please contact our sales team with your specific requirements, sales@atiuk.com

SiteBox can be configured to suit multiple applications, offering complete flexibility with many benefits.

- Fast, low cost, fully portable water quality policing system
- Policing system that offers an independent final check
- Modular system designed to suit individual site needs
- Ability to measure anywhere, can foresee potential issues and advise early, which avoids complaints and allows mitigating action
- Zero and span data stored internally so calibration can be done anywhere
- Internal clock records total run time on the sensor
- Calibration timer can alert users when calibration is due
- Two alarm set points are available
- Sensor diagnostics report problems in clear message form
- 16-character user defined 'Tag' name
- Ultra-low powered M-Nodes
- Years of run-time on batteries
- Various options of power supply from 12 Vdc to 230Vac
- Sample flow rate with alarm switch
- Pressure and flow controlled internally
- RS485 modbus output of parameters and diagnostics
- Installed and generating data within 30 minutes, reducing costly onsite time



At the heart of the SiteBox system are ATI's new industry-leading M-Nodes, a complete sensor and transmitter housed in a miniaturized body.



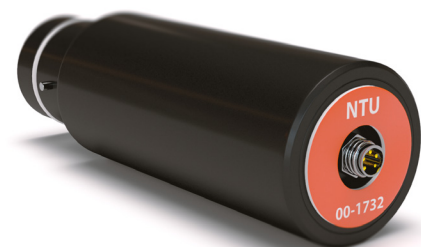
M-Nodes are complete water quality monitors equivalent to traditional online instruments. The M-Nodes are connected to the water supply using a purpose designed 'click-connect' flow cell arrangement. M-Nodes are connected in series to minimise water usage and can run at pressures up to 6 bar. M-Nodes are ultra low-powered and run autonomously for years at a time on small batteries. Alternatively they can be powered from a local plc or telemetry system.

SiteBox M-Node sensors are available for over 20 water quality parameters. Users simply select the parameters required for a specific location and ATI assemble them into a bespoke, integrated, modular system. All Nodes communicate on a common RS-485 sensor bus using Modbus protocol. Each M-Node has an IP-67 M8 water-tight connector for external communication. Power for the M-Node system is also supplied via the RS-485 bus. M-Nodes may even be used independently by system integrators who wish to communicate directly with the nodes using their own PLC system.

Available parameters:

- Free chlorine
- Turbidity
- pH
- Conductivity
- Combined Chlorine
- Total Chlorine
- Chlorine Dioxide
- ORP
- Dissolved Ozone
- Dissolved Oxygen
- Pressure

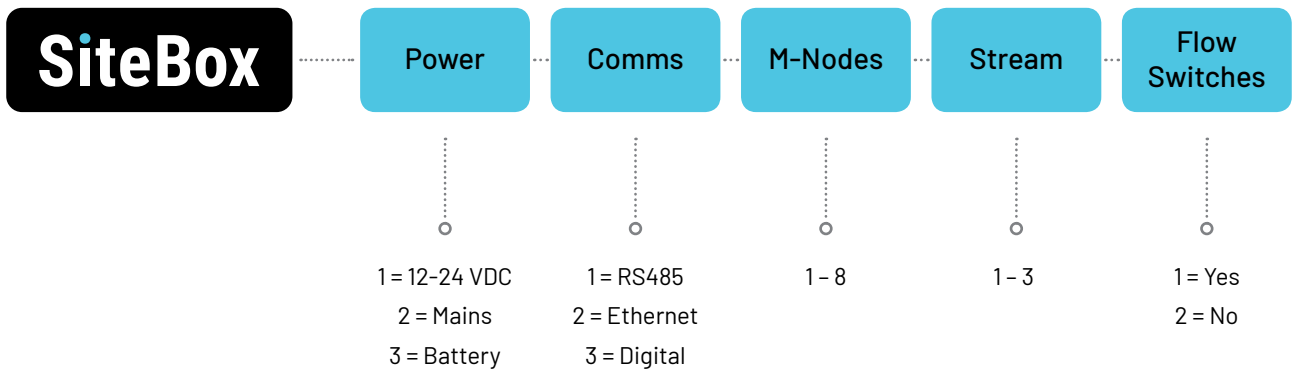
and many more



Bespoke Options



The modular approach of SiteBox allows users to order a bespoke system specifically designed for their needs. The system has the option of three different power sources, five communication channels, up to 8 sensors from over 20 parameters and up to three streams, plus a flow switch option.



Power Options

Power consumption requirements of traditional water quality monitors prevent their use in locations where AC power is not available. The low power design of the SiteBox system allows these monitors to operate on 12-24 VDC power, as well as battery power, without sacrificing reliability. To further improve power consumption, the system allows users to operate in either continuous or cycle modes. In full continuous mode, power is constantly applied to M-Nodes and measurements are continuously taken.

When operating in cycle mode, the measurement nodes are placed in "sleep mode" for much of the time. Every 15 minutes, the Nodes are switched to "full power" for about 15 seconds in order to take a reading and store data. Operation in cycle mode extends battery life considerably.



System Type	Full Power Mode (at 12V)	Low Power Mode
12-24 VDC with modem	43 mA + 3 mA/node	15 mA + 3 mA/node
12-24 VDC without modem	30 mA + 3 mA/node	15 mA + 3 mA/node
12V battery with modem	26 mA + 3 mA/node	4 mA + 3 mA/node
12V battery without modem	12 mA + 3 mA/node	4 mA + 3 mA/node

Note: During modem operation, power draw can spike to about 150 mA for the duration of the data transfer. A typical daily data transfer takes about 3 minutes.

M-Nodes

Part Number	Parameter and Range	Resolution
00-1847	Free Chlorine 0-5.00ppm	0.01ppm
00-1848	Conductivity 0-2000uS	1uS
00-1849	pH 2-12 pH	0.01 pH
00-1850	ORP 0-1000mv	1 mv
00-1851	Dissolved Oxygen 0-20.00ppm	0.01ppm
00-1852	Dissolved Ozone 0-5.00ppm	0.01ppm
00-1853	Turbidity 0-40.00 NTU	0.01 NTU
00-1854	Combined Chlorine 0-5.00ppm	0.01ppm
00-1855	Total Chlorine 0-5.00ppm	0.01ppm
00-1856	Fluoride 0.1-10.00ppm	0.01ppm
00-1857	Chlorine Dioxide 0-2.00ppm	0.01ppm
00-1858	Peracetic Acid 0-200ppm	1ppm
00-1859	Hydrogen Peroxide 0-20.00ppm	0.01ppm
00-1863	4E Conductivity 0-2000mS	1uS
00-1864	Pressure 0-300 PSIG (0-20 Bar)	1 PSI

SiteBox Controller

Part Number	Description
00-1795	SiteBox Controller, 12-24 VDC with SD Card
00-1811	SiteBox Controller, 12 V Battery with SD Card
00-1796	SiteBox Controller, 12-24 VDC with SD Card and 3G Modem
00-1812	SiteBox Controller, 12 V Battery with SD Card and 3G Modem
00-1885	SiteBox Controller, 12V Battery with SD Card Modbus Enabled
00-1798	Portable M-Node Calibrator



ATi UK

Technology House, Gatehead Business Park, Delph New Road, Delph, Saddleworth, Greater Manchester OL3 5DE

+44 (0) 1457 873 318 sales@atiuk.com atiuk.com