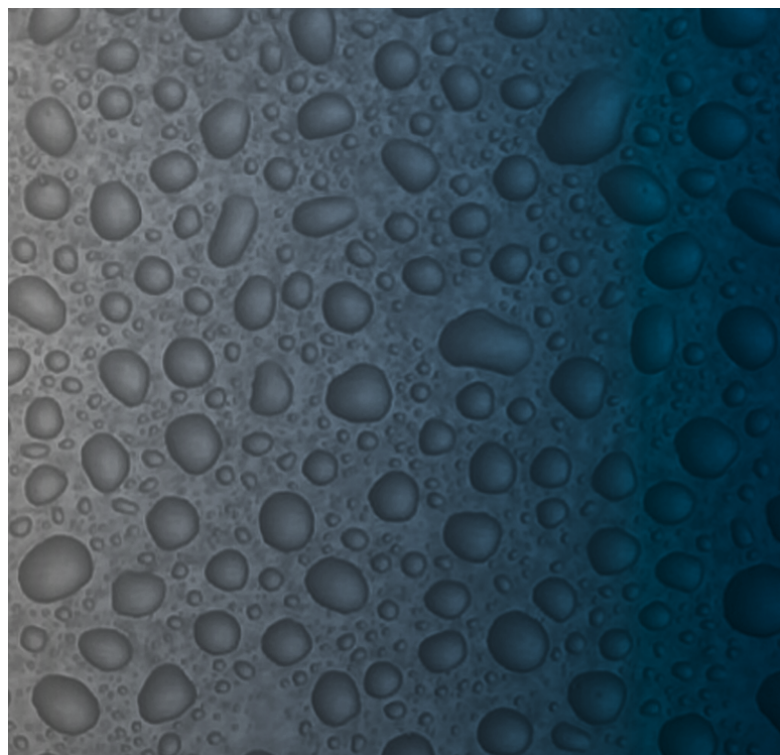


# sitebox



**A full monitoring and control system, in a box**



**ATi**  
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## The Smart Alternative to Instrumentation Panels

## M-Node Smart Sensors

SiteBox, ATi's pioneering breakthrough in water quality control; a brand-new approach to water quality monitoring systems.



At the heart of SiteBox are ATi's new smart digital sensors, the industry-leading M-Nodes, a complete full-featured sensor and transmitter housed in a miniaturized body.



SiteBox is a complete water quality monitoring and control system that can be used in a variety of applications, from drinking water treatment (raw, treated and final) to process water in the food industry, all housed in a carry-on luggage-sized box. Its modular nature enables you 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 typically generates live data (eg SCADA) within 30 minutes. This dramatically reduces the overall cost of the instrumentation package. SiteBox also has a small footprint, along with low water usage, and can be configured for dual or triple validation, multi-stream (1- 3), up to eight sensors and over 20 parameters.

### Available Parameters:

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

### SiteBox

- Ultra-low powered M-Nodes
- Years of run-time on batteries
- 12-24 VDC mains power option
- Integrated flow, pressure control and monitoring
- RS485 modbus output of parameters and diagnostics



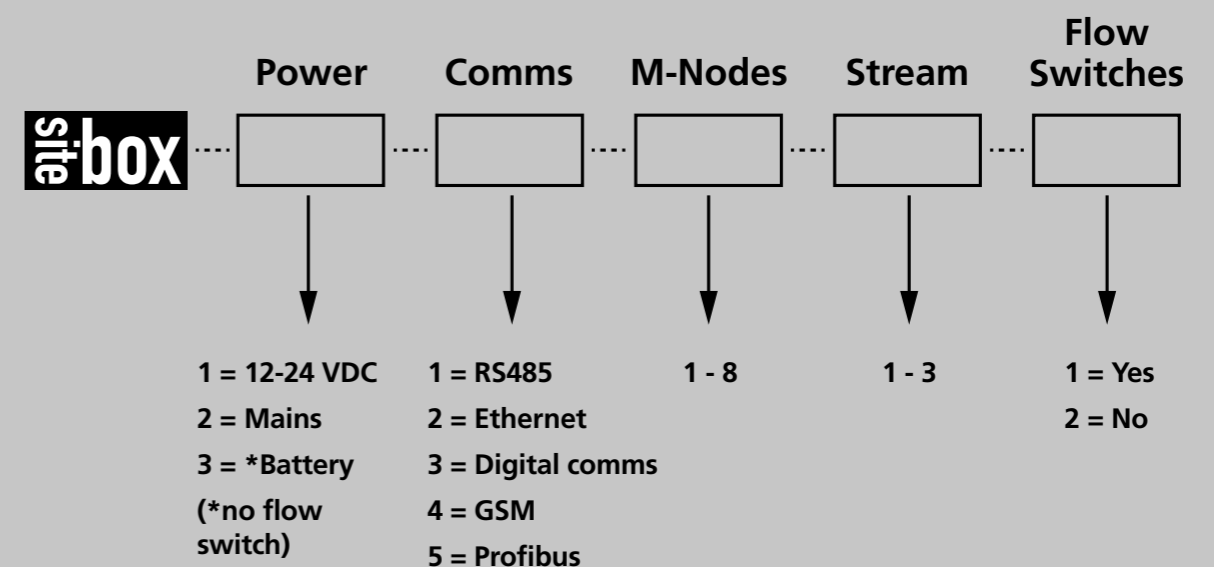
## SiteBox benefits



- Small footprint means it can be used almost anywhere
- Under 30 minutes to install and data delivery, reducing costly onsite time
- Bespoke system designed to meet your individual site needs
- Eliminates costly, time consuming and complex design process associated with installation panels
- Sensor diagnostics and calibration timer alerts give increased confidence measurements

## SiteBox Bespoke Options

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



### SiteBox Dimensions

External: L 585 x W 410 x D 295mm  
 Internal: L 660 x W 490 x D 335mm  
 Bottom: 245mm  
 Lid: 50mm



# Available M-Nodes

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.



## M-Node Specifications

### M-Nodes

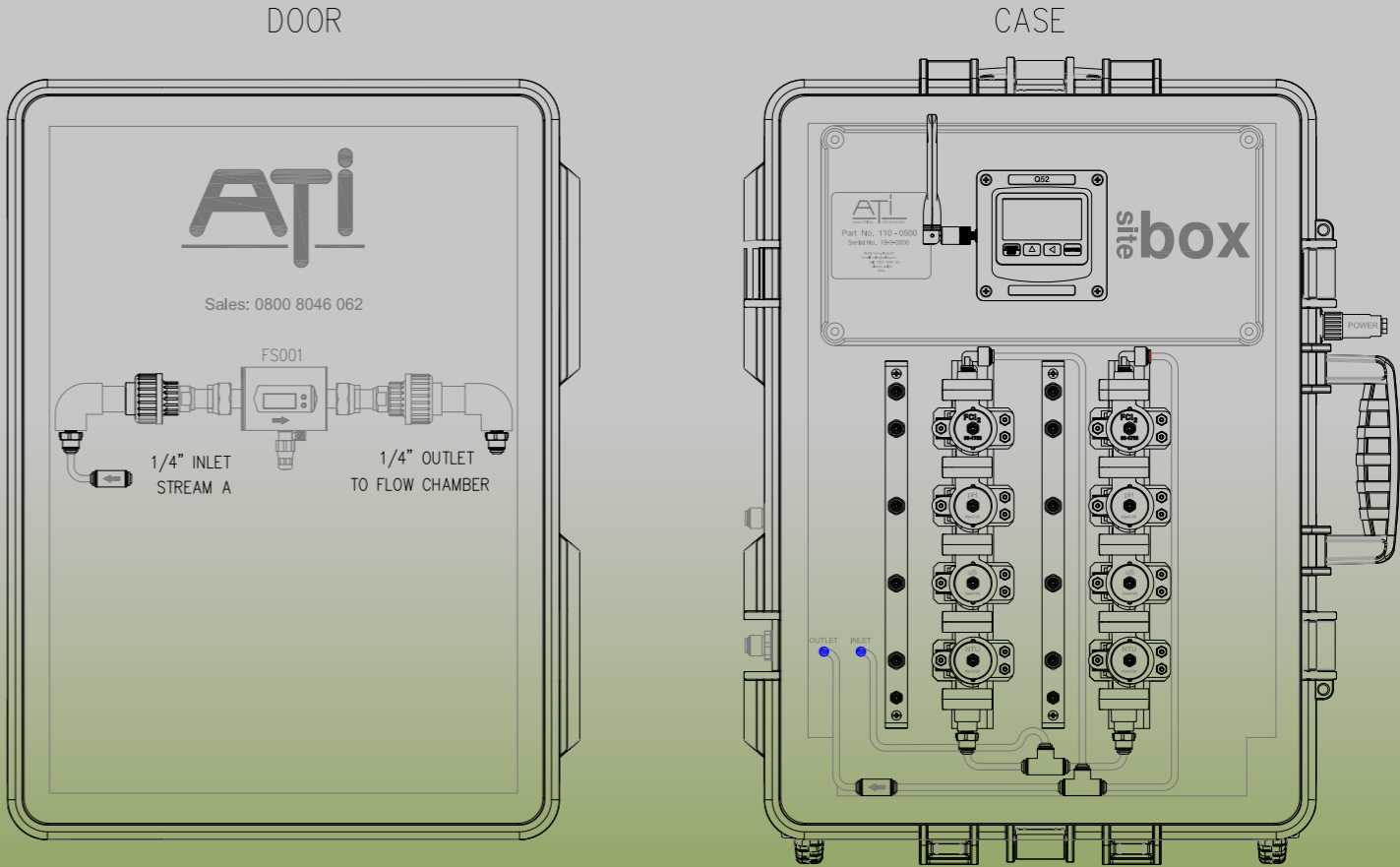
Part Number	Parameter and Range	Resolution
00-1847	Free Chlorine 0-5.00ppm	0.01ppm
00-1848	Conductivity 0-2000uS	1uS
00-1849	pH 2-12 pH	0.01pH
00-1850	ORP 0-1000mv	1 mv
00-1851	Dissolved Oxygen 0-20.00ppm	0.01ppm
00-1852	Dissolved Ozone 0-5.00ppm	0.01ppm
00-1853	Turbidity 0-40.00NTU	0.01 NTU
00-1854	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 0-5.00ppm	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

## 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

## 8-Node System Sample (other options not shown)



# 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.

The table below provides an estimate of power/battery requirements for the system.

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
12 V battery with modem	26 mA + 3 mA/node	4 mA + 3 mA/node
12 V 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.

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