

ATMO[®]
C U B E

Indoor air quality monitoring system

Special version for Bluway[®]



Who we are

ATMOTECH air quality monitoring solutions has been on the market for the last 4 years. Early in 2016 we've launched ATMOfube - world's first portable air quality monitors. Since then we've produced and shipped tens of thousands of units and partnered with major players in air quality industry.



BOSCH



HITLAB



ATMOTECH originated as a spinoff from a well-known hardware design house [NotAnotherOne](#), which developed and released more than 30 various IoT products and mobile devices to the market.

Our product line



**Atmotube
PRO**



**Atmotube
PLUS**

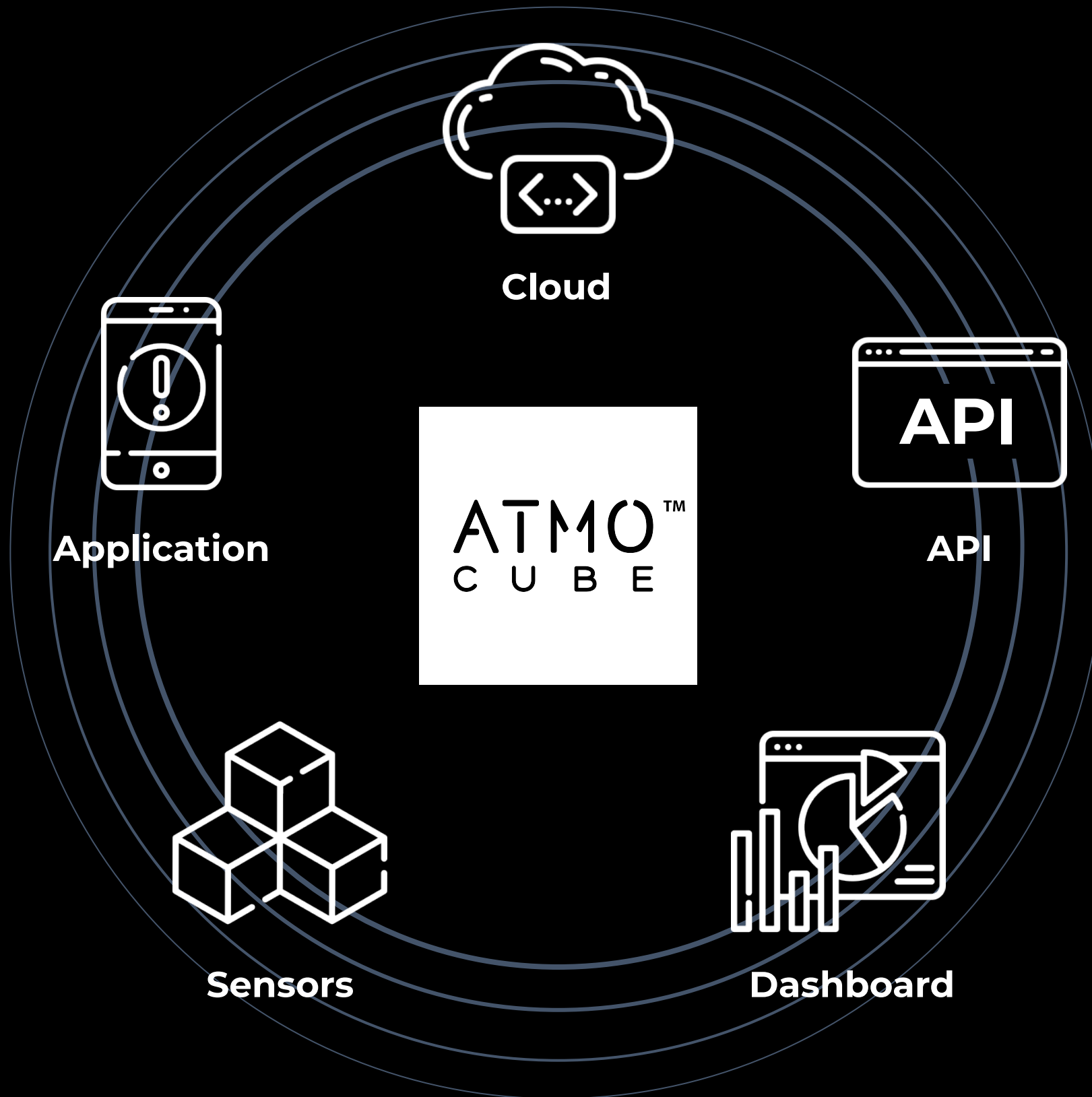


**Atmotube
MASK**



**Atmocube
(NEW)**

What is Atmocube



Atmocube is a complete and reliable solution for complex air quality monitoring in private, public and commercial buildings.

It accurately measures the most dangerous air pollutants, such as PM1, PM2.5, PM10, VOCs, and tracks vital environmental parameters: relative humidity, temperature, atmospheric pressure, noise and light levels in real-time.

As a core element of the Indoor Air Quality Management System, Atmocube is an energy-efficient IoT-solution which is easy to install and use.



Aside from well-known health issues caused by air pollution, air quality directly affects our cognitive performance, particularly our abilities to focus, strategize, and respond to a crisis (Research materials on this topic are collected in this [article](#))

There are many factors impacting indoor air pollution, but most of them can be changed or significantly improved, if carefully monitored.

Among those factors:

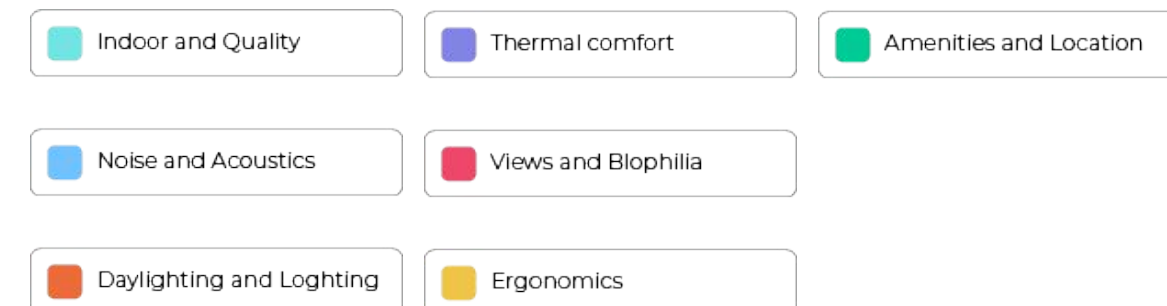
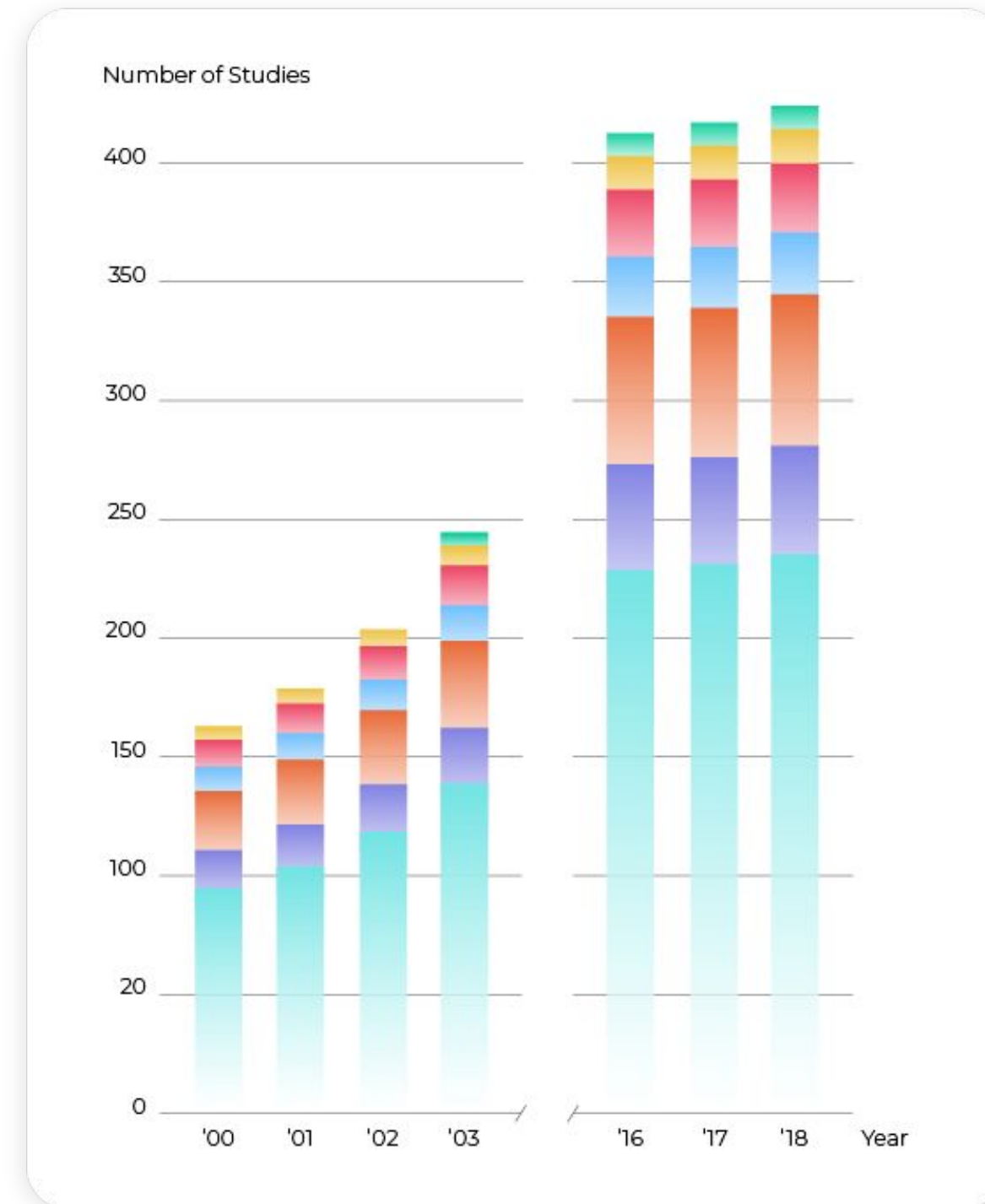
- Poor maintenance of heating, ventilation, and air conditioning systems;
- Emissions from building materials, flooring, paints, and furnishings;
- Excess moisture and mold;
- Dirty floors, dusty surfaces;
- Toxic cleaning supplies;
- Office equipment.

Trends

Interest in the air quality monitoring of buildings had been growing slowly up until recently. With the recent mass adoption of green / sustainable building standards, businesses are paying more attention to people's wellbeing and how they are affected by indoor environments.

Both people and businesses are becoming more conscious of the well-being, when applied to the places, where they spend the most of the time - the workplace.

Following this trend, major Healthy/Green/Sustainable Building standards have included air quality and indoor environmental conditions on the list of key metrics.



Global Indoor Air Quality Solutions Market 2020-2024



Building health standards

Major green / sustainable building certifications include the following environmental metrics as core standards:

- tVOC
- PMs
- CO2
- Radon
- Temperature
- Humidity

Some are also evaluating noise level and light intensity.



Atmocube in details

Customizable front tiles.



- Switch On/Off

Environment parameters status

Technical characteristics*

Sensors configuration:

- PM1
- PM2.5
- PM10
- VOCs
- CO2
- Temperature
- Humidity
- Atmospheric Pressure
- Noise levels
- Light sensor

Connectivity:

- Wi-Fi (802.11 b/g/n @ 2.4GHz)
- Bluetooth 4.1 (5.* ready)

Power:

- 50/60Hz USB-C, 5V @ 2A
- Direct AC/DC wiring (24V)

Dimensions:

- Width: <128mm (5 inch)
- Height: <128mm (5 inch)
- Depth: <45mm (1.7 inch)

Weight

Below 300g (10.6 oz) **

Indication

Array of RGB LEDs for major pollutants/parameters status

Cloud data storage

Flexible options for cloud storage and services (dashboard, reports, data access control, APIs)

Future roadmap options

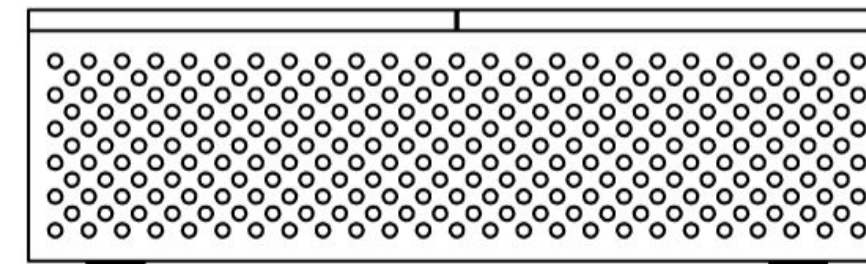
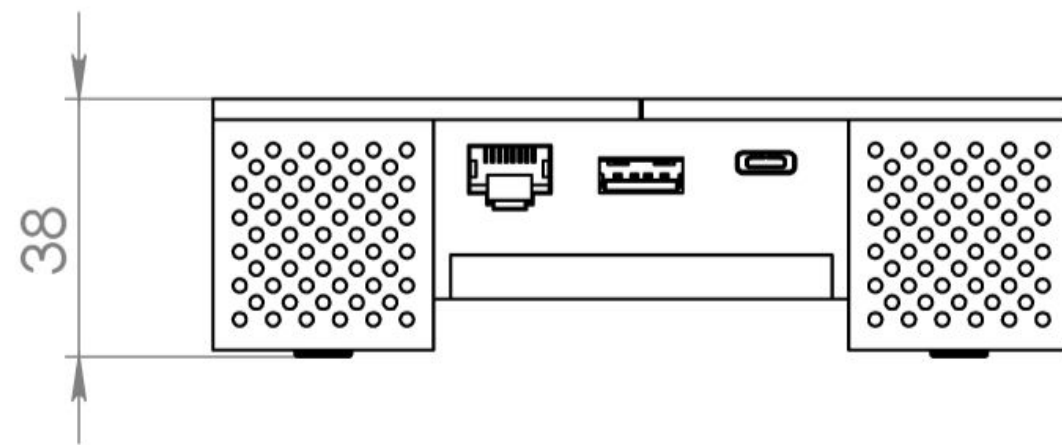
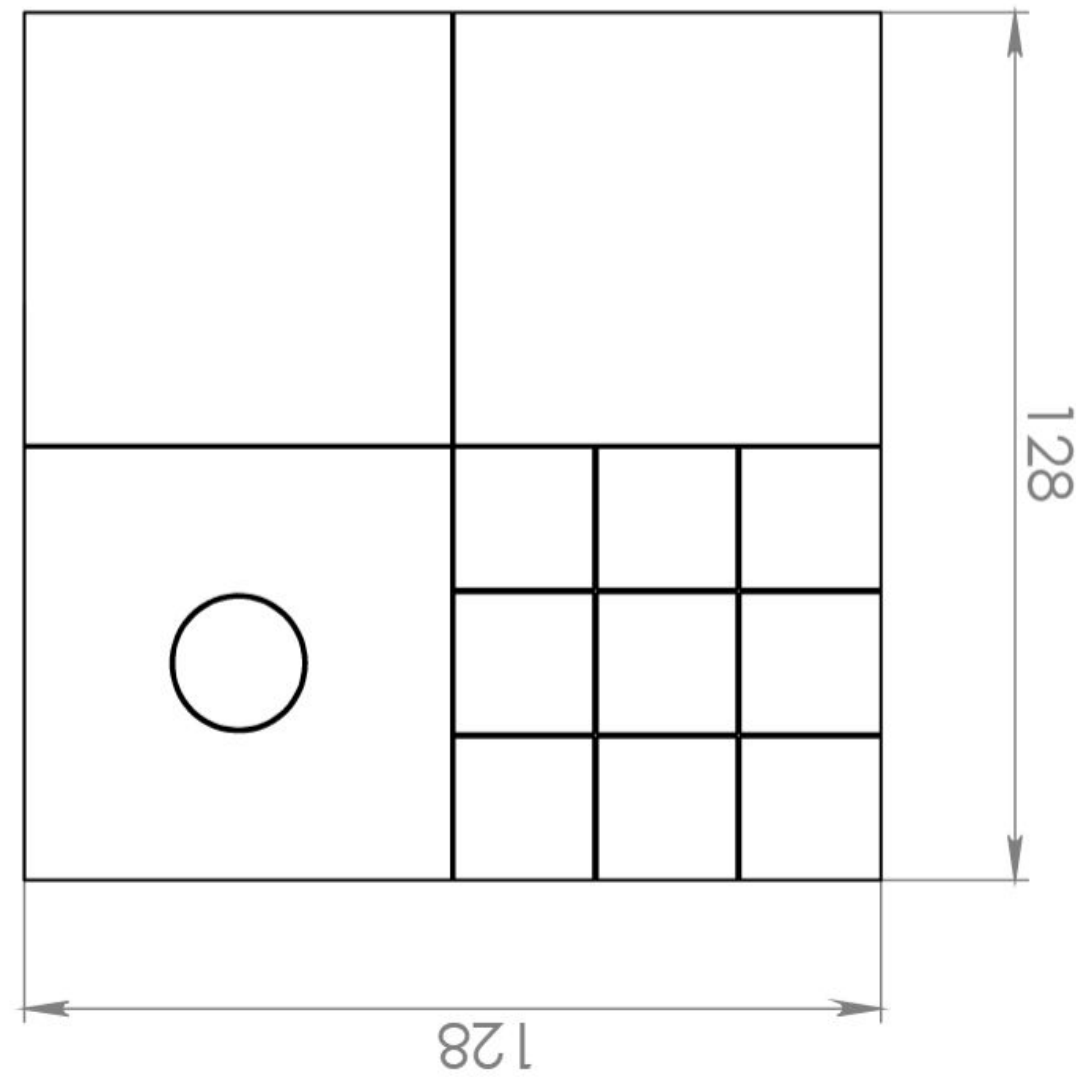
(future plans - additional functions would be developed iteratively, hence, not included into the default SKU)

- CO sensor
- O3 sensor
- Formaldehyde sensor
- Backup battery
- Ethernet with PoE
- LTE or NB-IoT module
- Thermostat / HVAC direct control
- Basic and extended occupancy detection

* Refer to the MOU for the detailed configuration / sensor specs.

** Final product weight is a subject to change (due to mechanical design optimisation, mass production plastics, etc.)

Device drawings with dimensions



Confidential – do not share or distribute

* Ethernet connector provided for reference purposes; default configuration will contain USB Type A and USB Type C connectors

Advantages of Atmocube

- Variety of sensors
- Real time data tracking and Cloud APIs
- Reliability and measurement accuracy
- Simple installation/plug & play approach, ease of management
- Elegant design and several mounting options
- Ease of customization/branding
- Future-proof, customizable and upgradeable (see the roadmap):
 - Extension modules to support additional RF technologies: (3G/4G modem/NB-IoT modem) via extension boards
 - Extension module to support HVAC/AC control
 - Optional backup battery
 - Support of additional Bluetooth modules/beacons

Benefits of Atmocube deployment for companies

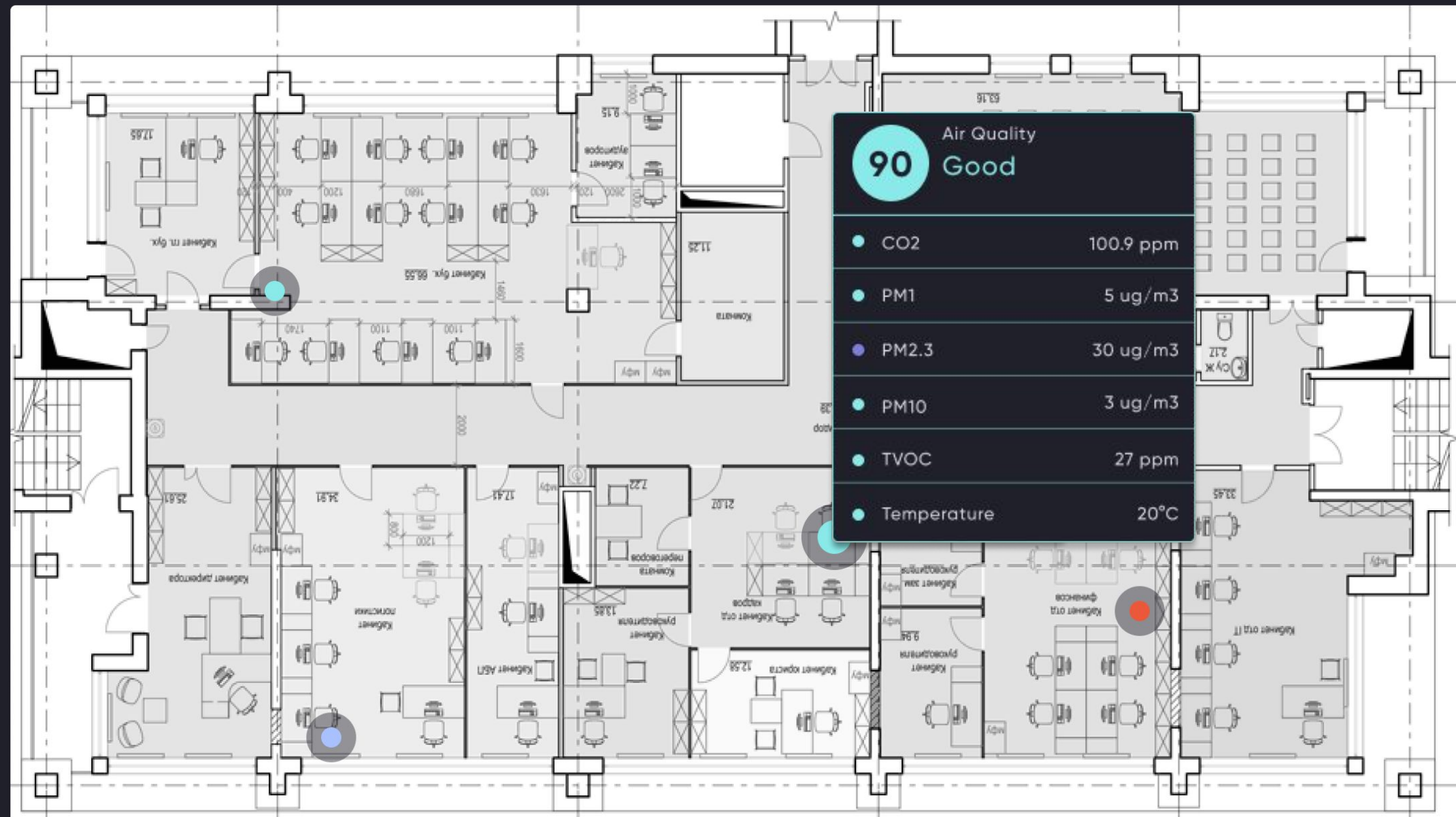
- Manage the venue's environment/ambiance efficiently, resulting in an increase in employee satisfaction
- Continually assess the building in accordance with leading green/healthy building standards, adhere to the sustainable development goals of enterprises/organizations
- Increase the value and attractiveness of the venue
- Discover insights by utilizing historical data / analytical features
- Use insights to reduce operational costs, improve energy efficiency, track correlation between ambiance and people's wellbeing
- Provide a universal dashboard with a user-friendly interface, allowing you to manage multiple venues and see the average parameters / trends for a multi-monitor environment

Easy to set up and monitor

AIR QUALITY

San Francisco office

Floor 1



Real-time air quality data management

ATMO CUBE

Atmotube

Dashboard

Reports

Manage devices

Users

Building map

AIR QUALITY

San Francisco office | HR Team

CO2 15:34:33 **1230 ppm**

PM1 15:34:33 **15 ug/m3**

PM 2.5 15:34:33 **9 ug/m3**

PM10 15:34:33 **5 ug/m3**

TVOC 15:34:33 **30 ppm**

Temperature 15:34:33 **18°C**

16.08 - 01.09 | Day | **Week** | Month

MANAGE DEVICES

San Francisco office | Floor (All) | Add device

Status	Device name	Location	Floor
Online	HR Team	San Francisco	Floor 1
Online	Server room	San Francisco	Floor 1
Online	Lounge	San Francisco	Floor 1
Online	CEO office	San Francisco	Floor 5
Online	Lobby	San Francisco	Floor 5
Online	Design office	San Francisco	Floor 5

Time selector | Export

Custom

Last 24 Hours

Last 7 Days

Last Month

All time

27 August

CO2	720 ppm
PM1	5 ug/m3
PM2.3	6 ug/m3
PM10	3 ug/m3
TVOC	27 ppm
Temperature	20°C

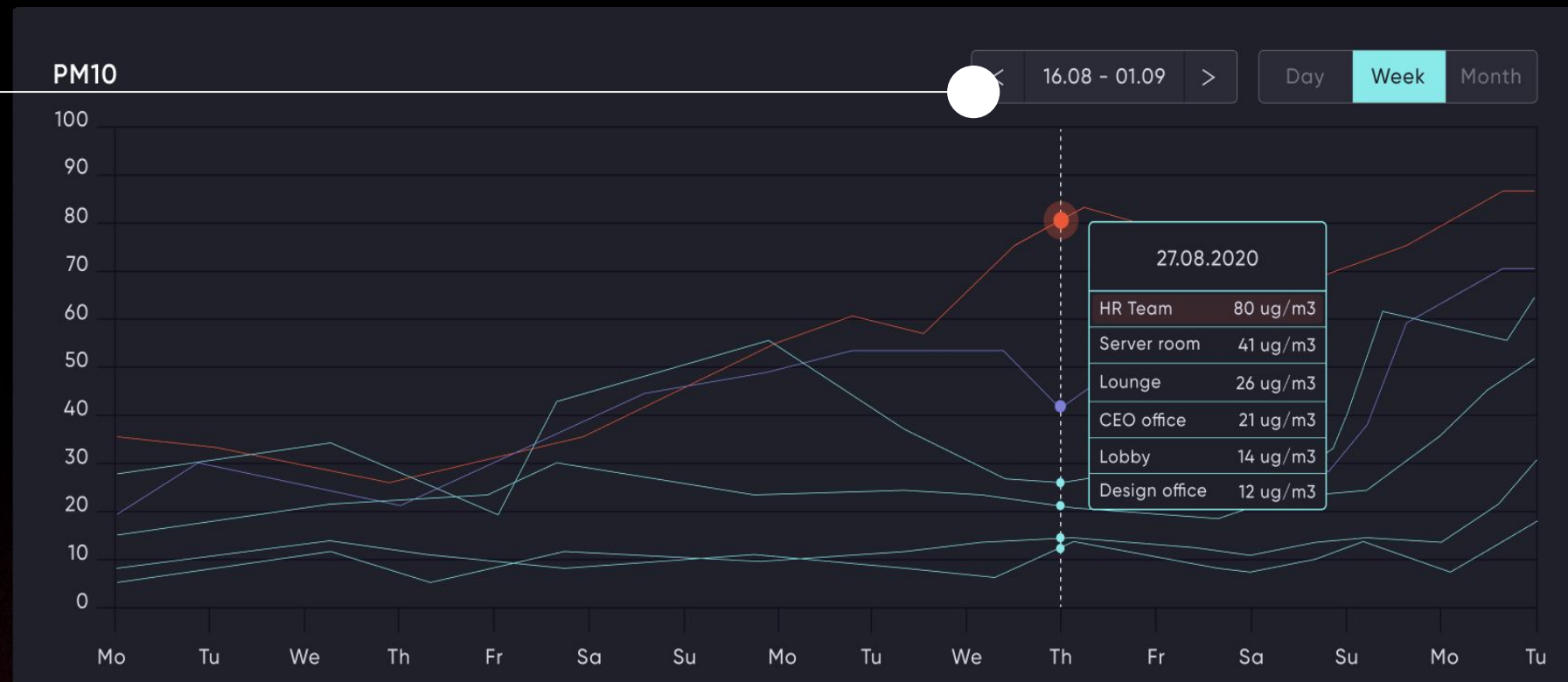
You have 4 new notifications

- 90 Day Reports HR Team 19.09.2020
- CO2 Design Team 19.09.2020
- 80 Day Reports CEO Office 18.09.2020
- 60 Day Reports Design Team 18.09.2020

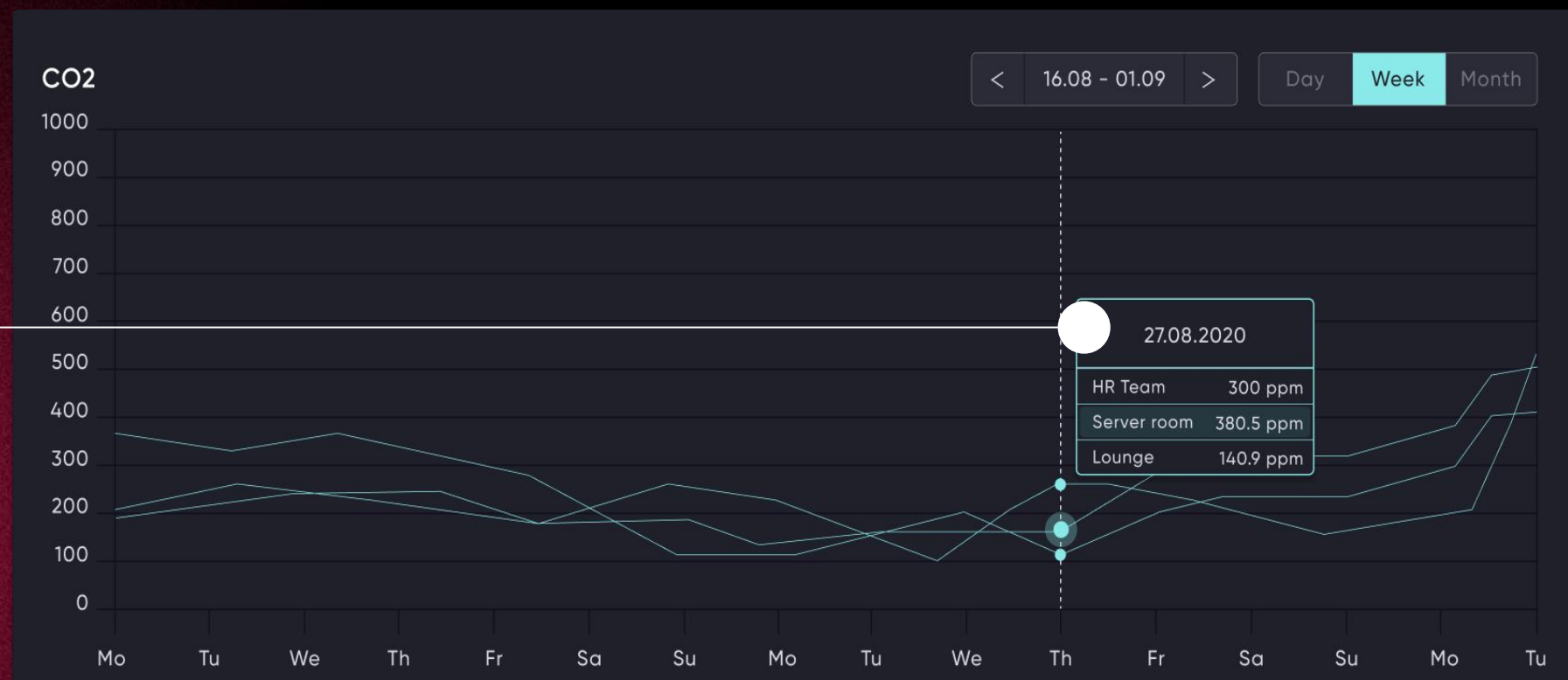
View all alerts

Metrics and Reports

User-defined timescale for charts



Readings detailed at selected time-point



Metrics and Reports

The dashboard features a dark theme with a grid of controls and data. At the top, there are three callout boxes: 'Filter by facility/office' pointing to a dropdown menu showing 'San Francisco office'; 'Selected device' pointing to a 'Time selector' dropdown; and 'Export data tool' pointing to a red 'Export' button. Below these is a data table for 'Air Quality' with a score of 90 and 'Good' status. The table lists parameters: CO2 (100.9 ppm), PM1 (5 ug/m3), PM2.3 (30 ug/m3), PM10 (3 ug/m3), TVOC (27 ppm), and Temperature (20°C). To the right is a grid of device status cards for various locations: HR Team (green), Louge (green), Cafeteria (red), Design office (blue), Lobby (green), Server room (green), Conference room (grey), and CEO office (orange). Callouts also point to the 'Air Quality' table and the 'Conference room' card.

Filter by facility/office

Selected device

Export data tool

San Francisco office

Time selector

Export

Real-time data for selected device. Colour coded parameters

Air Quality	
90	Good
CO2	100.9 ppm
PM1	5 ug/m3
PM2.3	30 ug/m3
PM10	3 ug/m3
TVOC	27 ppm
Temperature	20°C

Identify devices that are "Offline"

HR Team	Louge
Cafeteria	Design office
Lobby	Server room
Conference room	CEO office

Data protection and security

The security of your data is our highest priority.

Atmocube infrastructure is hosted within Amazon Web Services (AWS). This is designed to follow international security [standards and regulations](#), while protecting confidentiality, data sovereignty and data privacy regulations.

AWS has a [Privacy Shield](#) certification ensuring compliance with GDPR regulations related to transferring data outside of the EU.

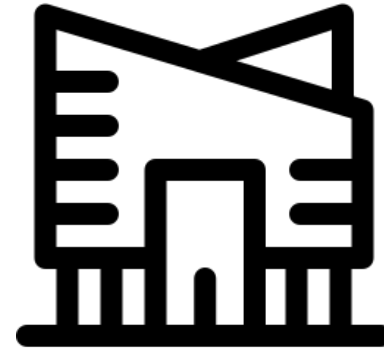
Private AWS deployment is possible on request (subject for additional license fees).



Use cases



**Green Smart
Buildings**



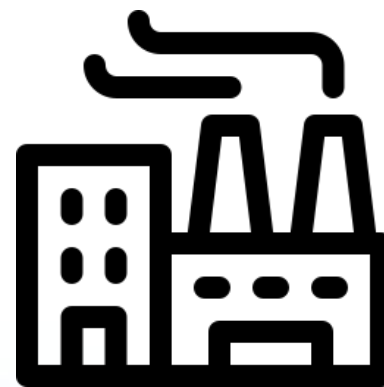
**Shopping
centers**



**Universities
and Schools**



Hospitals



**Industrial
buildings**



Offices

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Thanks!

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