

## Industry Overview

Manufacturing is a complex, dynamic yet adaptive industry where every second counts towards productivity and safety. Spiralling costs and shortages mean that companies are looking very closely at their working practices to find ways to optimise processes and ensure a safe environment for personnel on the factory floor.

The integration of technologies such as edge computing, an innovative yet proven technology that optimises data processing, is key to facing these challenges.

**Nuvla.io** is SixSq's ecosystem that revolutionises the implementation of edge computing for manufacturing. It is secure, easy-to-use, application-centric, hardware-agnostic, cloud-neutral and container-native.

## Edge Computing in Manufacturing

### The importance of business continuity:

In manufacturing, every minute of downtime on the assembly line translates to revenue lost. Hence, ensuring business continuity is not just a priority but a necessity.

Nuvla.io facilitates the seamless integration of edge and cloud computing, offering a secure ecosystem for data management and analysis. By harnessing the power of edge computing, manufacturers can minimise disruption, optimise performance, and safeguard critical operations. This approach not only enhances productivity but also mitigates risks associated with network dependencies.


### Addressing security concerns:

The increased use of connected devices in the manufacturing process requires robust cyber security protection. Using edge computing, you can deploy powerful cybersecurity applications to prevent attacks.


Nuvla.io offers comprehensive solutions, tailored to meet the stringent security requirements of manufacturing environments. In addition, customers can deploy a private version of Nuvla.io running within their network, so that sensitive data stays within secure confines while enabling seamless connectivity with edge devices.

## Nuvla.io in Manufacturing

The implementation of edge computing through Nuvla.io can help you to:



**Monitor**  
Monitor real-time performance



**Detect**  
Enable detection and alerts




**Statistics**  
Generate usage and production statistics



**Continuity**  
Enables business continuity




**Cybersecurity**  
Protect your digital ecosystem

**Video**  
Gather video analytics for safety and efficiency



**Downtime**  
Minimising factory floor downtime



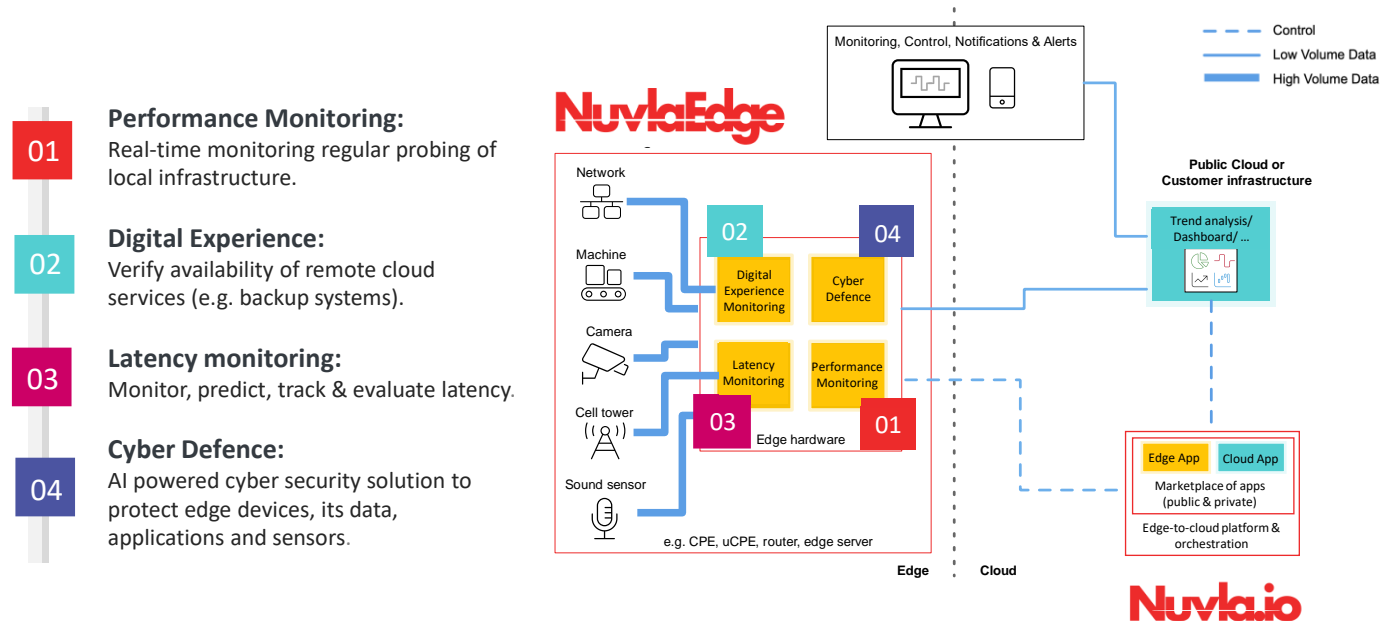
**Analyse**  
Provide real time analysis on data



## How can Nuvla.io support Manufacturing

Edge computing practices normally require technical knowledge, training, and specialised personnel able to understand and run a complex, digital ecosystem. Nuvla.io takes this complexity away, keeping you focused on your business.

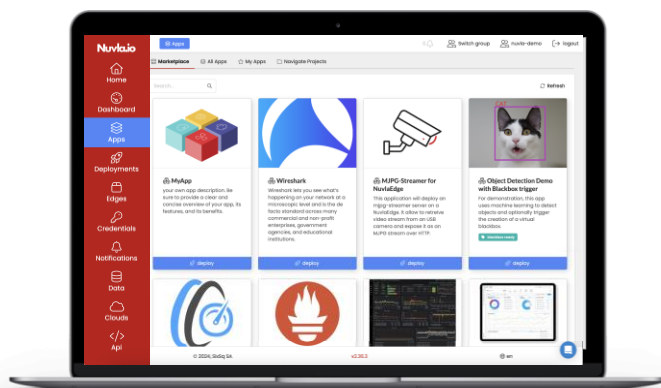
Nuvla.io provides a diversified suite of applications in a unique edge-first marketplace to enable your business at the edge. We operate to avoid vendor lock-ins and provide a simple interface and enjoyable user experience which allows anyone to operate otherwise complex edge computing systems.



NuvlaEdge is SixSq's software that enables hardware to become smart edge devices, securely and remotely managed from Nuvla.io. NuvlaEdge runs on most Linux-based operating systems with support for Docker and Kubernetes.

## A Bouquet of Solutions

- ✓ **Cutting edge computer vision, analytics, reporting, dashboarding and insights:** You get a modular solution, with no lock-in, taking advantage of an open eco-system.
- ✓ **Reuse existing hardware to reduce costs and carbon emissions:** You can deploy on a wide range of existing and new hardware, including cameras and sensors.
- ✓ **Acceptable by workers and unions yet improving health and safety:** You get a solution designed to be respectful of the privacy sphere of workers and the public.
- ✓ **Easily scales on wide range of sites:** You get an open, low network dependent solution, based on standards.



Nuvla.io offers a variety of existing ready-to-use apps that serve your specific needs. To learn more, visit our [catalogue](#).

You have total freedom to combine other apps, create your own, or register applications of your choice to the Nuvla.io ecosystem. This gives you huge flexibility to enable you to reach your manufacturing goals.

Unleash the power of Edge Computing with **Nuvla.io**