

# Virtual Perception Box

As data gathering is ever-changing and complex, reliable information is mission-critical for planning a better tomorrow. Swarm Analytics enables real-time data extraction from video streams with computer vision for sectors like the Smart City, Retail, Public Transport and more. The Virtual Perception Box is built for bringing the full Swarm Perception Technology to your hardware with full control of the system around.



## Swarm Perception Boxes are:



### Smarter

Constant improvements to conquer the data sourcing challenges of tomorrow



### Faster

Highly efficient Neural Networks through Swarms' Dynamic Perception Technology for IoT devices & large scale deployments



### Easier

IoT and Cloud native architecture, centrally managed for a few to thousands



### Affordable

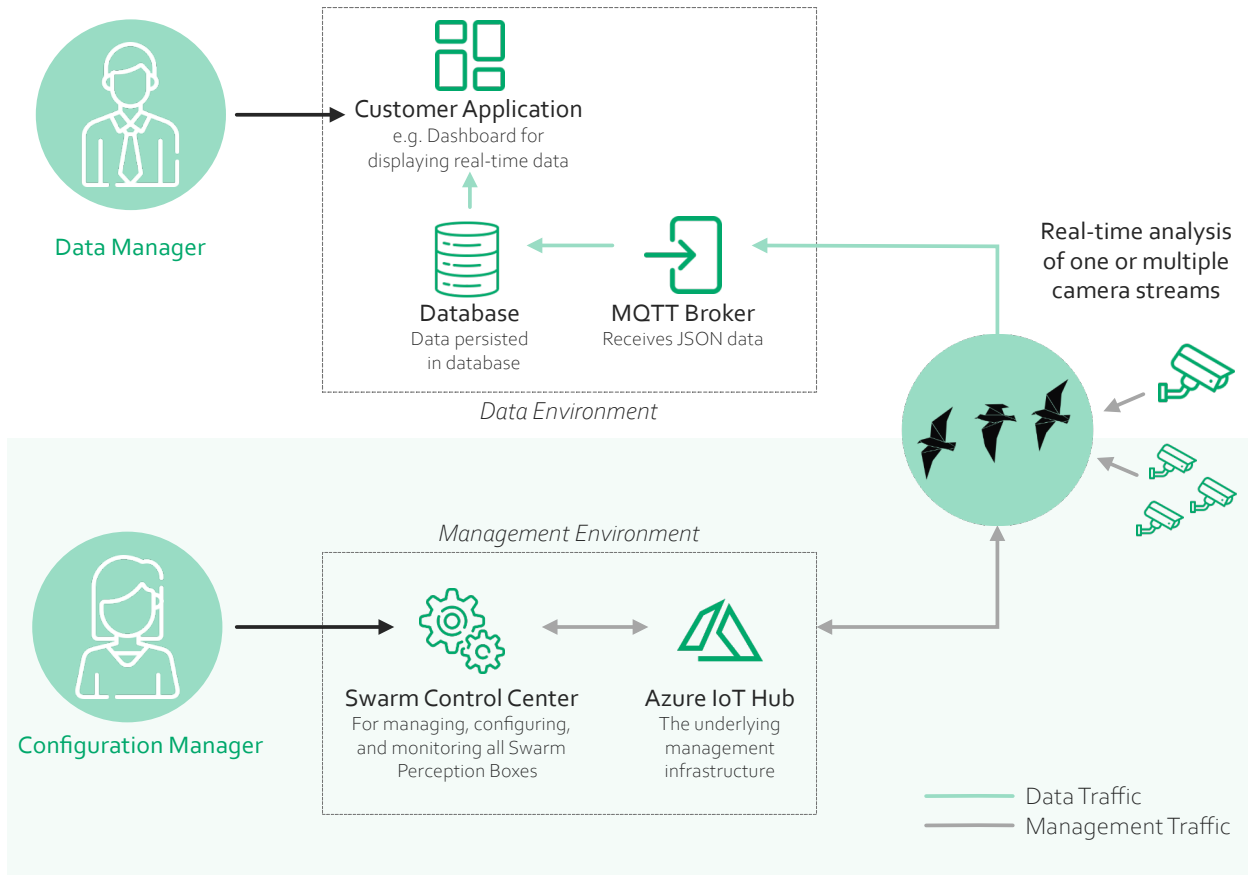
Starts from 1 €/day



### Trustworthy

Fully provisioned within your IT environment and native GDPR compliant operation schema

## How does the architecture work?



## Swarm Perception Platform

Scalable. Reliable. Built for integration.

Management where you want it, computation where you need it!

The Swarm Perception Platform is built with central management in mind, which allows fast and easy roll-out of Swarm Perception Solutions.

The screenshot shows the **Control Center** interface for the Swarm Perception Platform. The interface is divided into several sections:


- Explorer:** A sidebar on the left showing a list of devices:
  - Main Street (ID: p459li5-4484-4e)
  - Main Street 2 (ID: 81ohjui-8900-00)
  - Parking Center (ID: 7j7k0lp7-0521-10)
  - John Street (ID: 2e1py88-5398-86)
  - Parking Space 1 (ID: 1ajik34-4484-4e)** (Selected)
- Device Configuration:** A panel on the right for configuring the selected device. It includes a "Device Name" field (currently "Parking Space 1") and a "Save Name" button. A note indicates that the device name is a mandatory field.
- Camera Connection:** A section for configuring the camera connection. It includes:
  - Connection Type: RTSP
  - Camera Host\*: 23.458.10.7
  - Port: 782
- MQTT Connection:** A section for configuring the MQTT connection. It includes:
  - Configuration Mode: Custom MQTT Connection
  - MQTT Broker\*: 98.45.66.32
  - Port: 3598
- Live Stream:** A central video feed showing a real-time camera view of a parking lot with several cars. A "Configure Stream" button is visible at the bottom of the video feed.

## Technical Specs

	Virtual Perception Box
<b>General</b>	
# of IP Camera Streams	Unlimited RTSP camera streams, depending on your hardware
Minimum Camera Requirements	720p @ 25 FPS
Video Codec	H264
Stream Protocol	RTSP, UVC
Event Format	JSON
Message Output Support	- Custom MQTT Broker - Azure IoT Hub
X86_64 based CPU	- NVIDIA accelerator - Nvidia Driver Version: 450+ - OS: Ubuntu 18.04 LTS - Docker: 19.0.1+
ARM64 based CPU	- NVIDIA Jetson family - JetPack 4.4.1+
GPU Support	- Nvidia Volta GPUs - Nvidia Jetson Series
<b>Support</b>	
Standard Support	Included at no extra cost
Software updates	All software updates and new features included
Premium Support	Optional
<b>Price</b>	
Price per Year, per Camera Stream	365 €

**For more information or a demo, get in touch with us!**

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