

Swarm Perception Box®

Transforming Cameras Into Smart Sensors

For organisations who want to easily, fast and affordably get smart and trustworthy smart city and retail insights in real-time, the Swarm Perception Box is an AI-based sensor that analyses video streams from standard IP cameras. It offers fast plug-and-play deployment, easy central management and constant sensor updates, at no extra cost. The Swarm Perception Box is affordably and fairly priced, via a predictable all-inclusive annual fee with no hidden costs.



Unlike other technologies, Swarm Analytics is:



Smarter

Dynamic Perception Technology learns from the human brain and uses a smart and very fast AI tech to extract intelligence from video streams in real-time.



Faster

Constant AI training and optimisation, means that our technology gets smarter faster.



Easier

Plug & play and easy Central Management, means that you can be up and running in 15 minutes, with no AI knowledge required.



Affordable

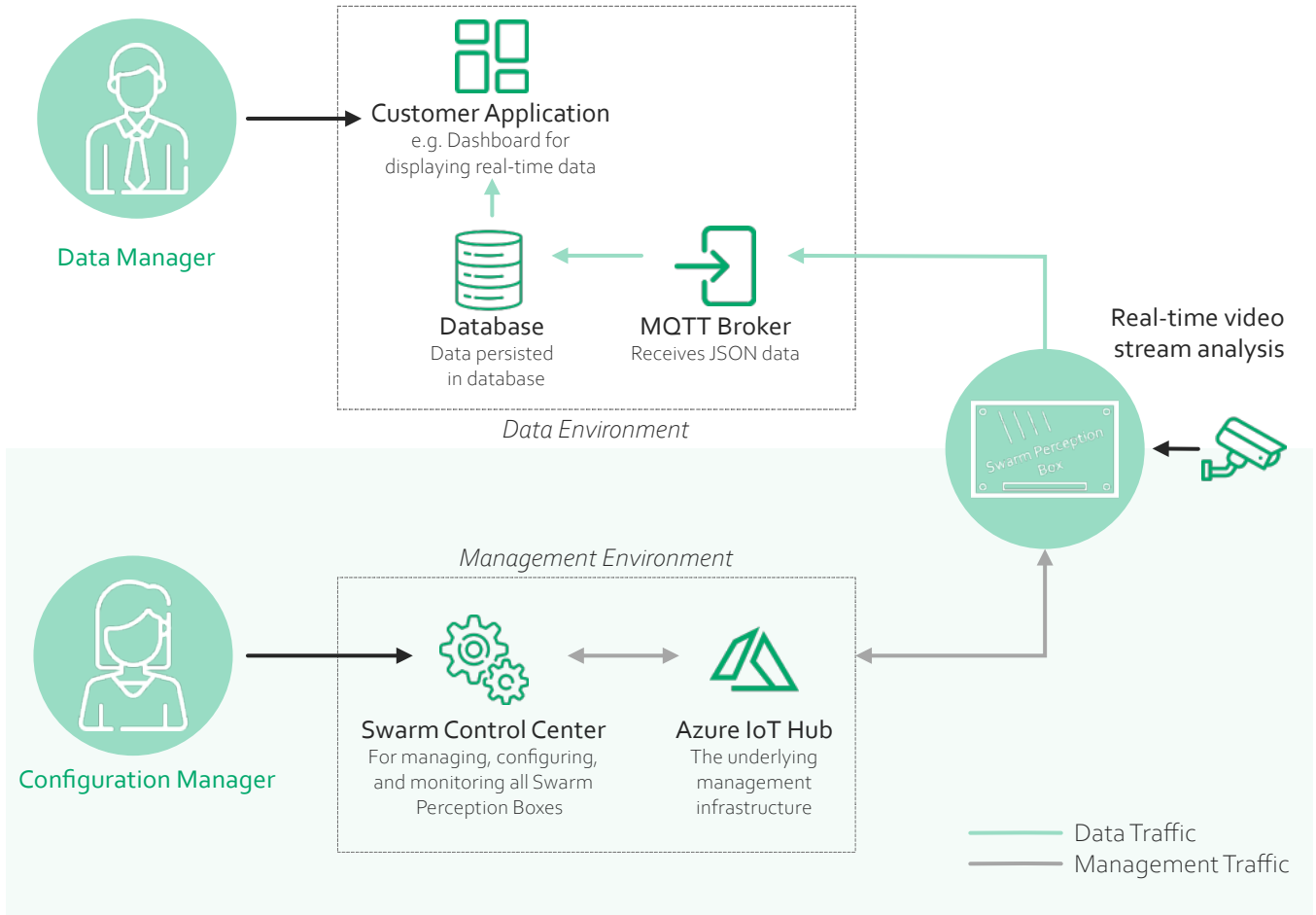
Designed from the ground up for cheap edge hardware. Costs from 1€/ day.



Trustworthy

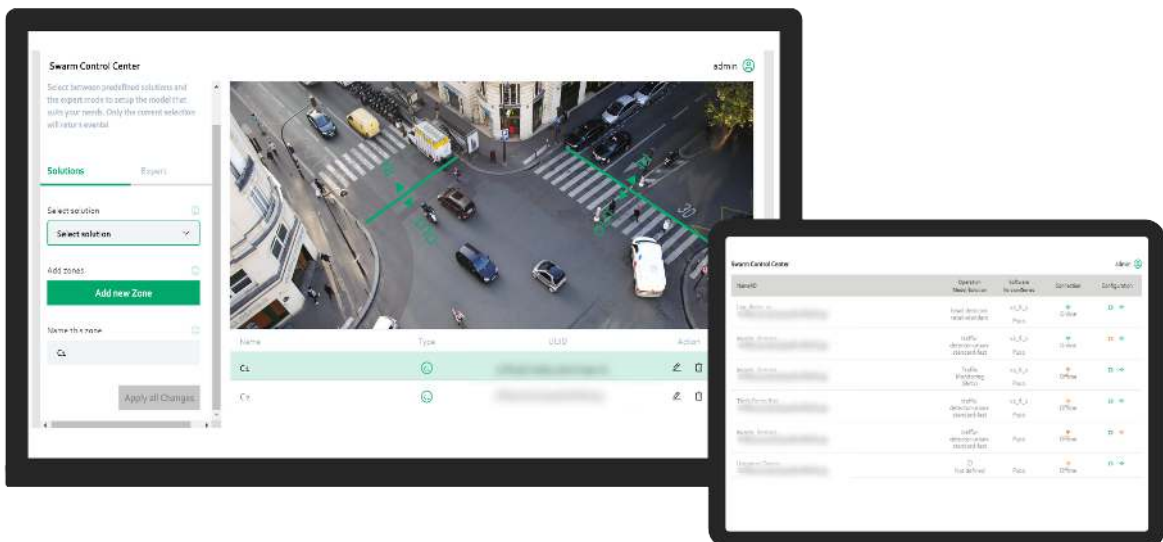
Fully transparent accuracy. 100 % GDPR compliant.

How does the architecture work?



Easy Central Management via the Swarm Control Center

The Swarm Control Center provides super easy browser based central management of Swarm Perception devices. Plug & Play deployment and a simple user interface, means that you can have a sensor up and running and sending data within 15 minutes. As the Swarm Control Center is designed to be self hosted and is only used for device management, Swarm Analytics has no access to your data at any time.



Select the best product model for your needs

All Swarm Perception Box® models are tailored to suit your needs to deliver smart real-time insight, using Swarm Analytics' revolutionary AI technology.

Type			
Name	Swarm Perception Box	Swarm Outdoor Perception Box	Virtual Swarm Perception
Example Picture			
Model code	P100	OP100	VPX
Application	For Indoor Installations	For Outdoor Installations	For your own Hardware (applies to supported hardware, OS and drivers)
Camera Requirements			
Protocol	RTSP (over IP)	RTSP (over IP)	RTSP (over IP)
Minimum Resolution	HD 720p@25 FPS	HD 720p@25 FPS	HD 720p@25 FPS
Encoding	H264	H264	H264
Picture Format	4:3, 16:9 360° Fisheye (for parking entry/exit counting only)	4:3, 16:9 360° Fisheye (for parking entry/exit counting only)	4:3, 16:9 360° Fisheye (for parking entry/exit counting only)
Night vision	Recommended	Recommended	Recommended
Hardware			
Form Factor	Hardware device	Hardware device + IP68 case	Software installed on your own hardware
Size	96.5 × 70.0 × 23.5 mm (without DIN rail)	255 × 205 × 112 mm	–
Weight	135 grams (without DIN rail) 172 grams (with DIN rail)	850 grams	–
Power Supply	External USB-C (included)	External Junction Box, 230 V	–
Power Consumption	< 8 W	< 20 W (may vary with camera used)	–
Gigabit Ethernet Port	1	1	–
Operational Temperature	-20 °C to +70 °C	-20 °C to +70 °C	–
LTE Modem	Optional	Included	–
Ingress Protection Code	–	IP68	–
External POE Supply for Camera Support	–	802 af	–
Pole/Wall Mounting Material	–	Included	–
Performance			
Speed	1 x HD (720p) real-time stream analysed (up to 25FPS)	1 x HD (720p) real-time stream analysed (up to 25FPS)	Multiple HD (720p) real-time stream analysed (up to 25FPS) (actual performance depends on OS, drivers and hardware used)
Deployment and Central Management			
Swarm Control Center	Included at no extra cost!	Included at no extra cost!	Included at no extra cost!
Swarm Control Center API	REST API	REST API	REST API
Plug and Play Deployment	Included	Included	Included
Azure Cloud	Self-hosted Swarm Control Center requires Azure and Azure IoT Hub.	Self-hosted Swarm Control Center requires Azure and Azure IoT Hub.	Self-hosted Swarm Control Center requires Azure and Azure IoT Hub.


	P100	OP100	VPX
Connectivity and Data Transfer			
IP Connectivity	DHCP	DHCP	DHCP
Data Endpoints	Azure MQTT, custom MQTT	Azure MQTT, custom MQTT	Azure MQTT, custom MQTT
Data Encoding	JSON	JSON	JSON
Typical Data Transfer (varies with number of objects detected and solution used)	< 100 MB / month	< 100 MB / month	< 100 MB / month
Edge Data caching (e.g. for dropped LTE connections)	Up to ca. 24 hours	Up to ca. 24 hours	Up to ca. 24 hours
Aggregated Data Web Service	REST API	REST API	REST API
Software Maintenance/ Hardware Support			
Standard Support	Included at no extra cost	Included at no extra cost	Included at no extra cost
Advanced replacement	Included, next business day shipping	Included, next business day shipping	–
Software updates	All software updates and new features included at no extra cost	All software updates and new features included at no extra cost	All software updates and new features included at no extra cost
Operating System (OS) and maintenance	Swarm OS Automatically maintained	Swarm OS Automatically maintained	Select supported OS OS self managed and maintained
Software provisioning	Hardware provisioned with Swarm OS/ software	Hardware provisioned with Swarm OS/software	–
Premium Support	Optional	Optional	Optional
Price			
Price (all inclusive)	950 €/ year	1450 €/ year	365 €/ year per stream

Do you want additional support?

Upgrade the included standard support to premium support for even faster response times. For details, please contact our key account team who will guide you through the available options via sales@swarm-analytics.com.

Contact the Swarm Analytics Team

 sales@swarm-analytics.com

 +43 664 8250762

If you want to learn how you can use the Swarm Perception Box for **Traffic, Retail, Parking** or **Public Transport**, please see our [solution pages](#).

About Swarm Analytics

Swarm Analytics develops revolutionary AI technology for transforming cameras into smart sensors. Turning simple cameras into GDPR compliant smart sensors leads to smarter, faster, easier, and trustworthy solutions while increasing affordability. Based on Swarm Analytics sensor technology, the solution partners deliver a broad range of end-to-end smart city solutions for traffic, parking, public transport, and retail. Founded in 2018 in Innsbruck, Austria Swarm Analytics' products are already in use throughout Europe and North America.