

ARGUS

BY PURPLE BLOB.

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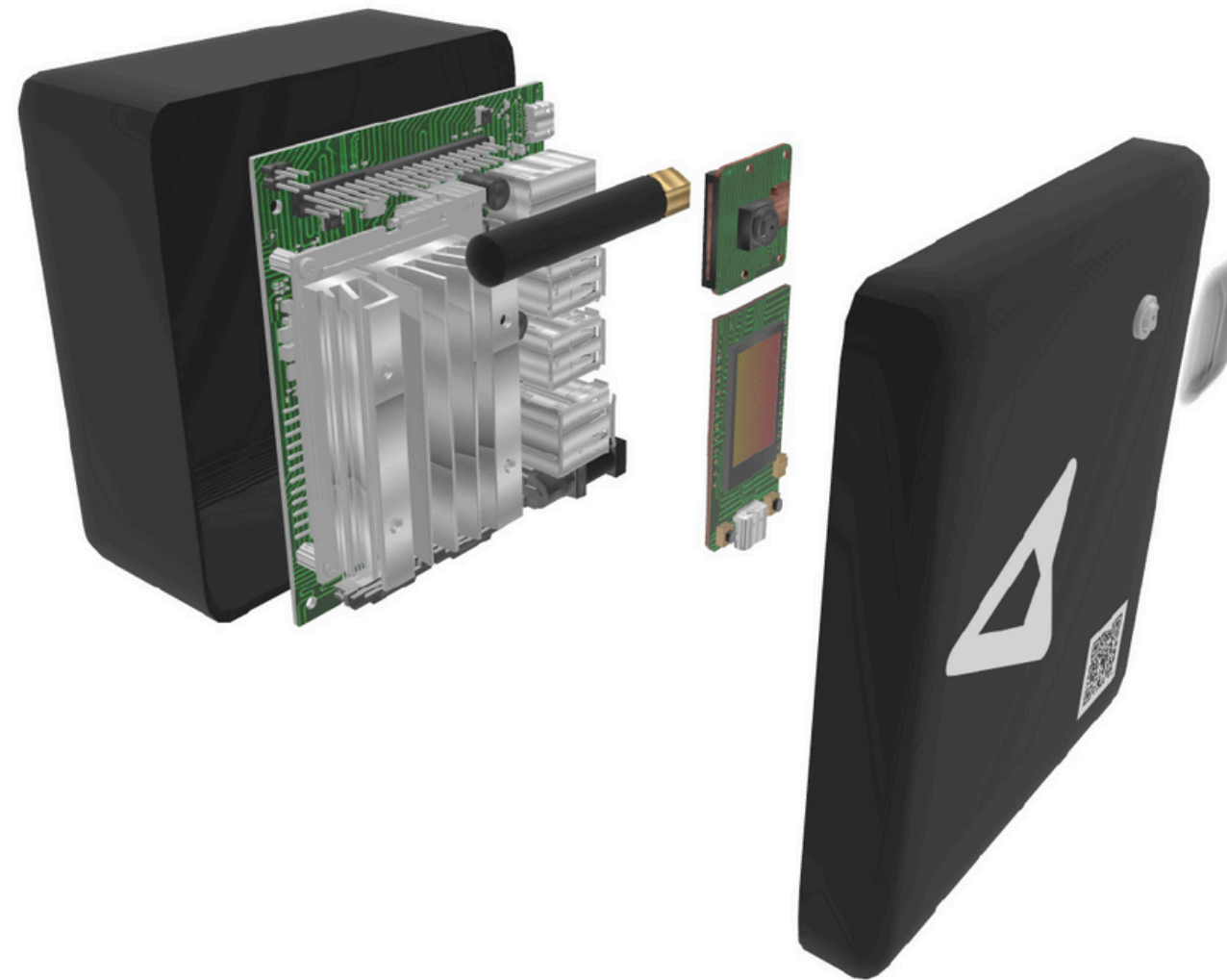


What is ARGUS?

What is ARGUS?

ARGUS is a smart and compact computer vision device that allows authorities and/or municipalities to extract key urban metrics from built-in cameras, deployed at street level.

Its artificial intelligence is capable of **recognizing** a high number of events and objects and reports via long-range wireless, without the need for cloud or traditional network deployments.



Details of ARGUS

- High resolution built-in camera
- Multiple programmable AI functions: ALPR, pedestrian, bicycle or car counting, people flow tracking, urban security, etc.
- Long wireless range
- Edge computing, without Internet or cloud connection.
- LoRaWAN 1.0.2 compatible

Advantages of ARGUS

Advantages of ARGUS

Accuracy

Utilizes cutting-edge AI algorithms to provide recognition accuracy above 90%.

Versatility

Argus can be used for a wide range of applications, from security to environmental monitoring.

Optimization

Optimizes the management of natural areas by reducing the need for manual inspections of signage and trails.

Generation of Valuable Data

Provides accurate data on the influx of people in natural areas, enabling better resource allocation and the generation of valuable insights.

Increased Safety

Enhances safety in natural areas by detecting cyclists, hikers, and violent situations.

Improved User Experience

Allows for better planning of routes and outdoor activities, attracting more visitors.

Technical Specifications

Especificación	Valor
Model	Waterproof box with mounting screws.
Protection	IP67
SSOO	Mendel Linux
Typical Consumption	5V
Power Supply	220V plug
Temperature Range	0°C a +50°C

Especificación	Valor
Edge TPU System-on-Module (SoM)	<ul style="list-style-type: none"> • Google Edge TPU ML accelerator coprocessor • 8 GB eMMC • 1 GB LPDDR4
USB connections	<ul style="list-style-type: none"> • USB Tyoe-C power port (5 V DC) • USB 3.0 Type-C OTG port • USB 3.0 Type-A host port • USB 2.0 Micro-B serial console port
Networks	<ul style="list-style-type: none"> • Ethernet: 10/100/1000 Mbps Ethernet/IEEE 802.3 networks • Wi-Fi: Wi-Fi 2x2 MIMO (802.11a/b/g/n/ac 2.4/5GHz)
Installation	Preconfigured plug-and-play, wall or pole mounting

Methodology

Methodology of ARGUS

ARGUS is a **plug-and-play** IoT device.

As it comes preconfigured, it only needs a power connection in a location with **LoRaWAN** coverage.

The device will automatically join the available network and will start monitoring the street in which it is installed by means of the built-in high-resolution camera.

The device packs several working modes, powered by multiple **AI computer vision models** that run on a GPU-accelerated edge-computing low power computer.

Each mode powers a use case and can only be used exclusively at any given time. Modes of operation can be changed via scheduling of LoRaWAN downlink frames.



Working Modes

Working Modes

Entity Counting

In this mode, the device recognizes up to 80+ classes of objects and vehicles (Cars, Trucks, Buses, Motorbikes, Trains, Bicycles, Pedestrians, Backpacks, Handbags, Suitcases, Skateboards, etc.).

Each detection is assigned an ID number and can be tracked along the camera range, identifying speed and direction of movement.

In future versions of the product, these entities will be able to be tracked, even between different ARGUS devices.

The product reports a total count by entity type periodically, attending to the configured timer.

Automatic License Plate Recognition

In this mode, the device recognizes and reports cars, and vehicles license plate numbers whenever they are detected by the built-in camera.

Could be used for vehicle tracking, low traffic zone controlling, access controls, etc.



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Legal Disclaimer

The information in this document may contain predictive declarations, including, without limitation, declarations related to the future product portfolio, financial operatives, future technology implementations, etc.

Certain specifications might differ from the results and developments here expressed or supposed in the declarations of this document. Therefore, the information is provided only as a reference and does not establish an offer or uptake.

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