



User Manual



Product Name: Argus

Model Name: DNL1R0

PN#: DNL1R0

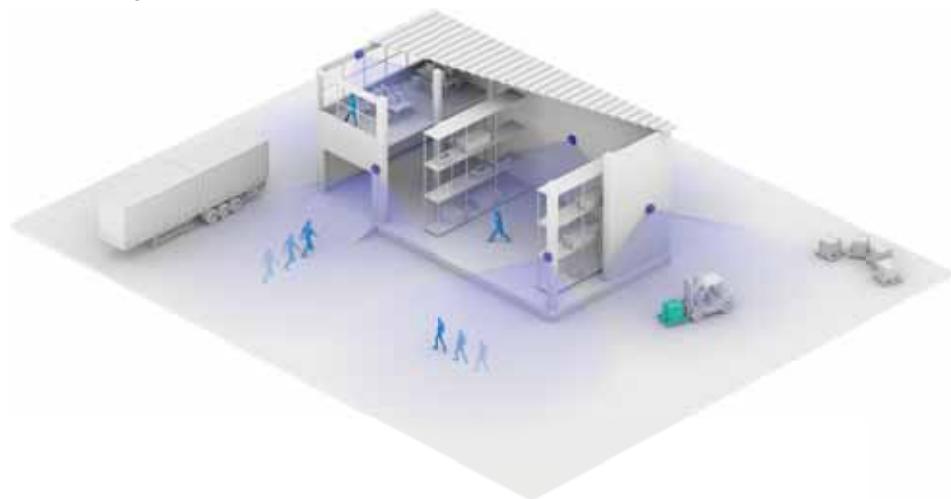
Unison Labs

About

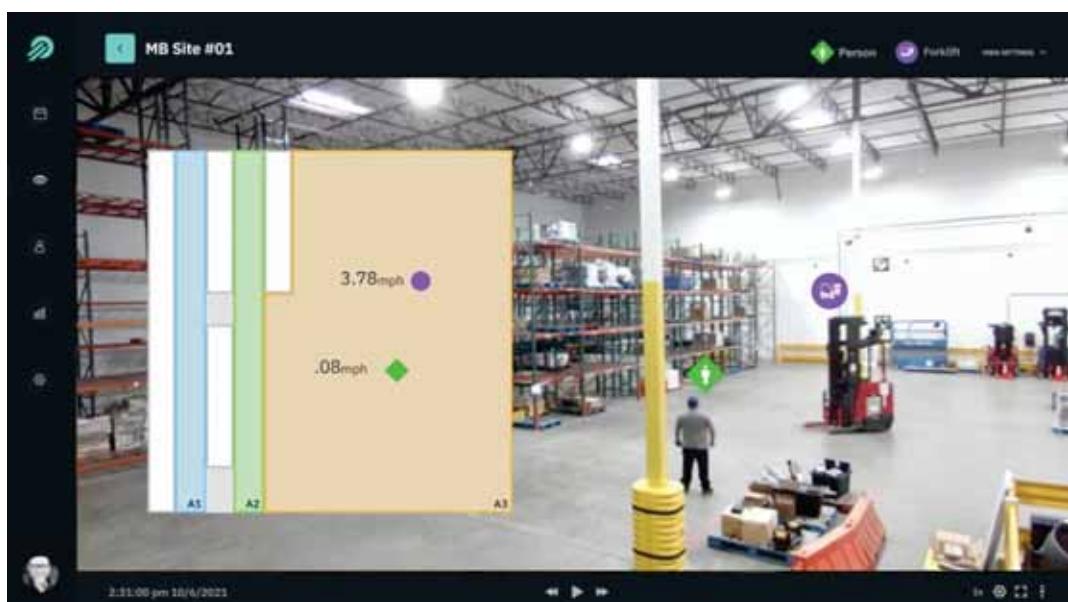
Unison Labs is a CA based start-up, building hardware/software solutions to track activity patterns of people, equipment and assets, with applications in supply chain operations. The product is based on company's proprietary deep fusion of mm-wave imaging radar and cameras, with edge-based ML, and the added intelligence to make sense of all of that data. The product will be deployed in industrial facilities to provide tagless activity tracking of people & equipment, and help companies optimize resource utilization and detect unsafe behaviors.

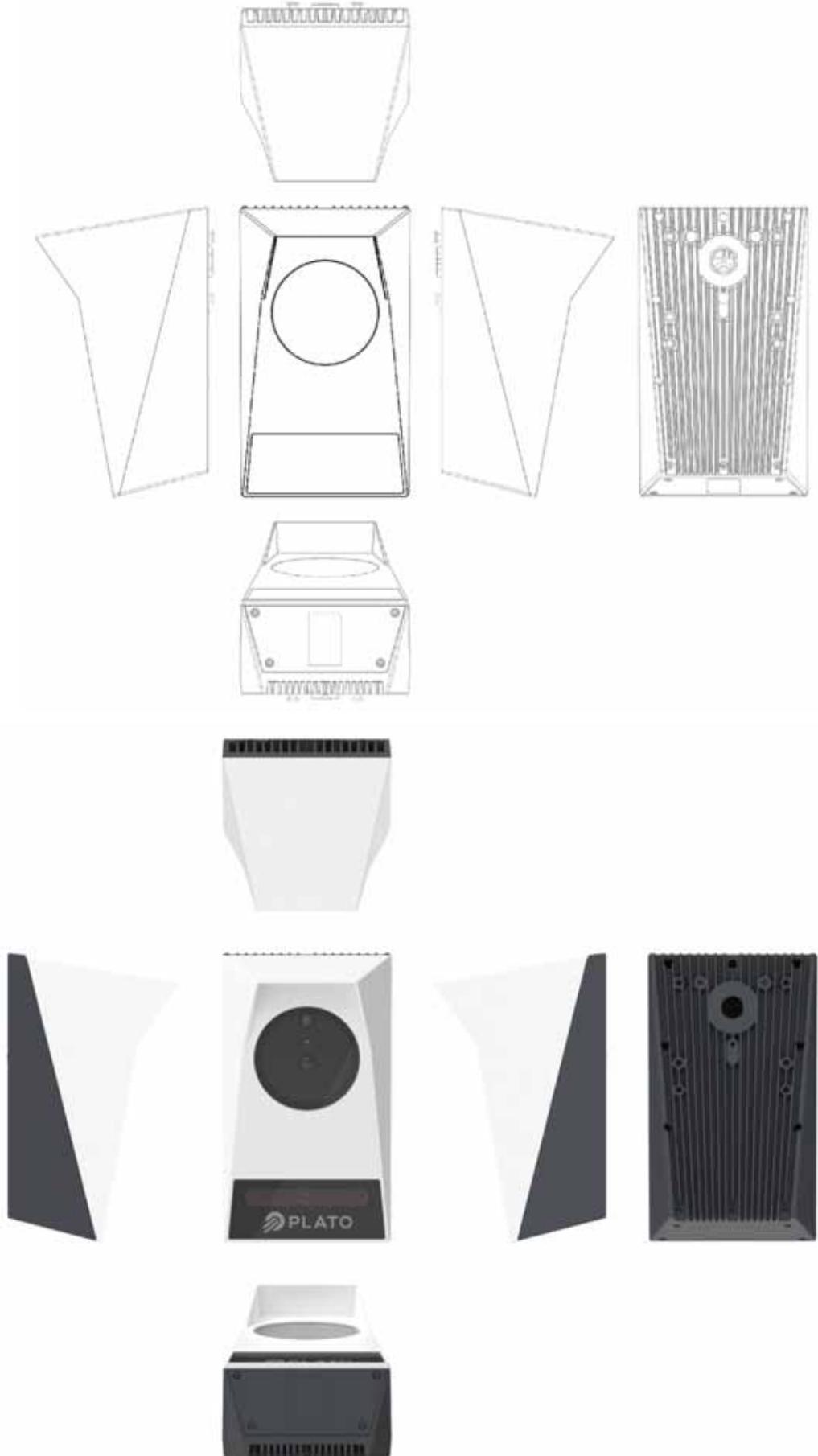
Product Usage

The company's product is installed in locations where activity patterns are desired to be monitored. Camera and mmWave sensor data is processed and fused with additional environmental information to provide analytics for a corresponding scene.



The compiled analytics from one or several of the company's products are then uploaded over Ethernet, via a PoE connection, to the cloud, where the customer is provided with a dashboard that aggregates information and can provide reports pertaining to safety events, recommendations to improve warehouse space and route efficiency, or insight into manufacturing productivity.





Features & Functionalities

| | |
|------------------------|--|
| Range & FoV | 50m Classification (person) 75m Classification (vehicle, forklift, truck) Horizontal: 90 degrees Vertical: 70 degrees |
| User Interface | VistoConnect webapp |
| Onboard Storage | 30 day 24/7 video retention. Customizable up to 6 months of data. |

Installation & Physical Features

| | |
|--|--|
| Recommended Mounting Height & Angle | Recommended height: 4 to 5m Recommended mounting angle: zero degrees |
| Weight | 6 lb |
| Dimensions | 158mm x 270mm x 140mm |
| Power | PoE+ |
| Connectivity Options | 1. Ethernet: connecting to local network 2. LTE |
| Operating & Storage Temperature | -40C to +60C |
| IP Rating | IP66 |
| Total Power Consumption | Up to 30W |
| Onboard monitoring sensors | mm-wave imaging radar Two 5MP cameras (wide and narrow angle) IR LEDs (illumination) |
| Processing | Edge-based NVidia Jetson NX |

Note: System installation or disassembly is not supported to be performed by customers.

System has a debug port behind a secure door that is not to be utilized by customers.

LTE is not currently available, but will be supported in future generations.

mmWave radar operation is limited to the 61GHz-61.5GHz band.

Installation Process:

Units are professionally installed by the the company's team using an included mount.



Four screws are used to attach the mount to the mounting surface.

The PoE cable can then be routed through the mount, through the IP gasket, and into the device.

The IP gasket is sealed and the device can then be rested on the V-grooves of the mount.

Then another four screws are used to attach the device to the mount.

The mount has several axes to enable control over the field of view of the device.

Once the device is mounted, the corresponding axes control screws can be tightened to fix the FoV.



The screw is for earth terminal, it shall be used 18 AWG minimum size with green-yellow conductor to connect to earth.

Software Operation Guide:

Units are professionally installed; post-installation, the unit will automatically boot. The device is then directly accessed by the company and configured in the backend to run a capture preset. After two days of calibration, the device is then ready to start providing analytics to the customer. Data then gets automatically uploaded and displayed via the company's customer-facing dashboard (see below). There are no user-exposed buttons; if a power-cycle is necessary, the device is unplugged. After being replugged, the device will automatically boot and capture using the last set configuration.



Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Professional installation instruction

Please be advised that due to the unique function supplied by this product, the device is intended for use with our interactive entertainment software and licensed third-party only. The product will be distributed through a controlled distribution channel and installed by trained professionals and will not be sold directly to the general public through retail stores.

1. Installation personal

This product is designed for specific applications and needs to be installed by a qualified person who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

2. Installation location

The product shall be installed at a location where the radiating antenna can be kept 20cm from a nearby person in normal operation condition to meet regulatory RF exposure requirement.

3. Installation procedure

Please refer to the user's manual for the details.

4. Warning

Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to a serious federal penalty.

Company Information:

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