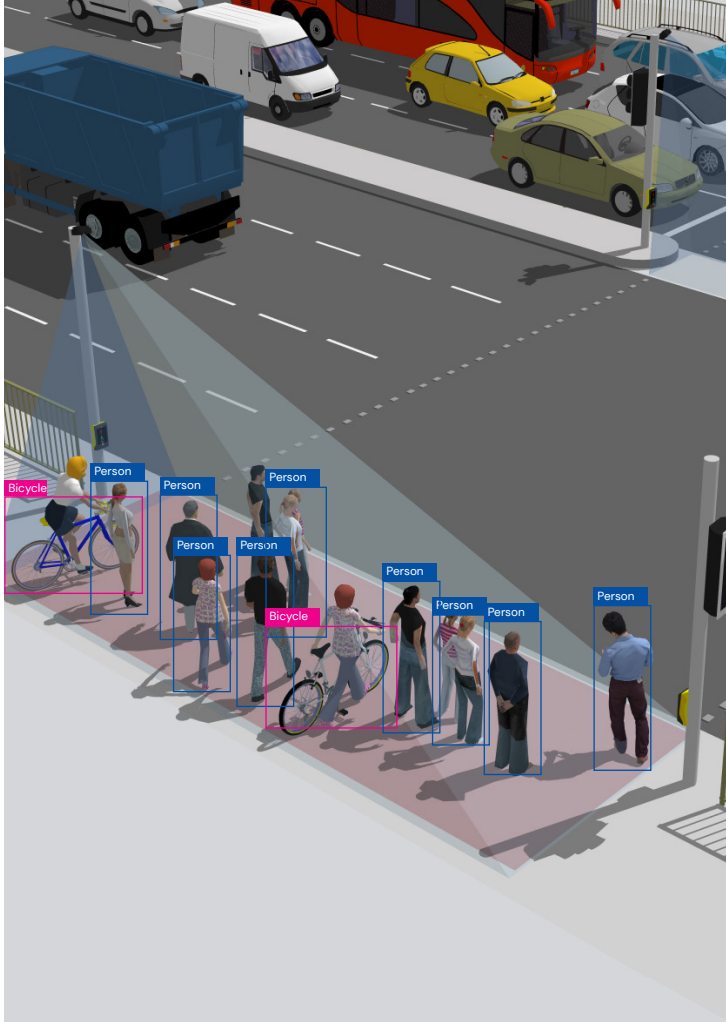


AGD646

AI Pedestrian and VRU Detector



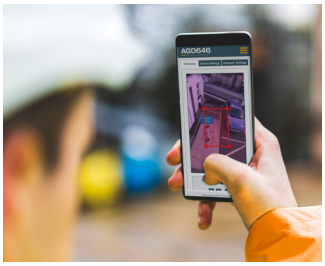
The AI Pedestrian and VRU Detector represents the next generation in intelligent detection technology for pedestrian crossings.

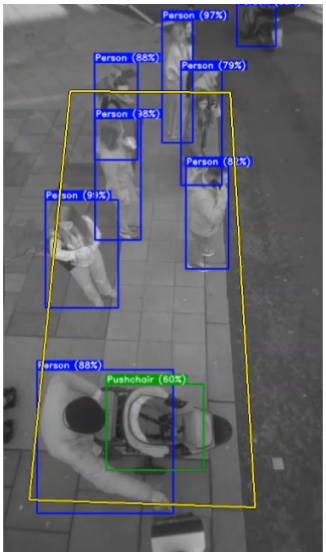
Building on the success of the AGD645, the AGD646 introduces Artificial Intelligence and long-range infrared illumination to deliver exceptional accuracy, reliability, and performance in all lighting and weather conditions.

Engineered specifically for kerbside detection, the AGD646 can identify pedestrians and cyclists in the waiting area, providing valuable data to support adaptive pedestrian signal control and improve safety for all Vulnerable Road Users (VRUs).

By identifying different user types in pedestrian wait areas, the AGD646 enables dynamic signal strategies that prioritise pedestrians and cyclists, reduce waiting times, and enhance crossing safety.

The AGD646 is where AI meets real-world safety, a true step forward in intelligent, connected detection for smarter cities and safer roads.







KEY FEATURES

- Next-generation AI engine specially trained for kerbside applications
- Long-range infrared illumination for large detection zones up to 3m × 10m
- High-quality image sensor and optics for enhanced detection accuracy
- Occupancy mode to enable pedestrian signal prioritisation
- Lower power consumption with improved efficiency
- Enhanced user interface for easy setup and monitoring
- Ethernet output with JSON data output
- Designed to meet TOPAS 2507B standards

AGD646

AI Pedestrian and VRU Detector

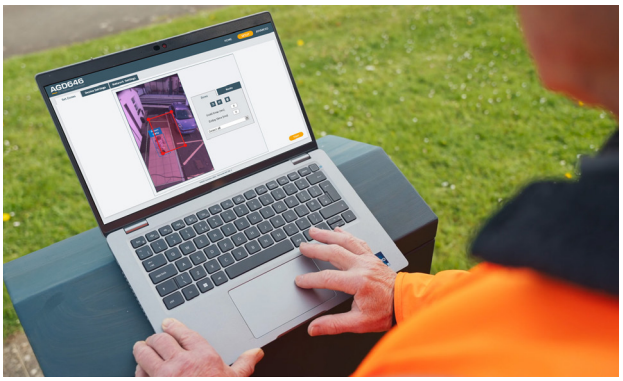
AGDTOUCH

Wi-Fi 3-Click Setup

WI-FI AGD TOUCH-SETUP WITH QUICK ZONE TOOL

The AGD646 is quick to set up using any Wi-Fi enabled laptop or mobile device - with its unique AGD Touch-setup that allows installers to define the detection zone and configure device settings.

Using the device's built-in Wi-Fi network, the AGD646 can be set up from a safe position on the ground, or nearby vehicle. Conveniently, the AGD646 can be adjusted for zone changes just as quickly in the same way.



AGD Quick zone tool

INNOVATION THROUGH COLLABORATION

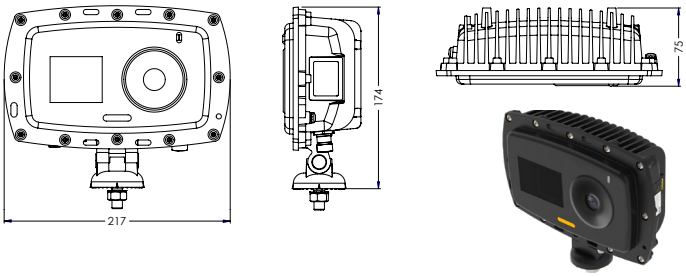
The AGD646 is the latest product to launch from the AGD Innovation Hub, offering early access to BETA firmware and dedicated AI models for specific target applications.

This continuous development platform ensures the detector evolves to meet emerging needs, with VRU and Pegasus support planned for post-launch updates.

PRODUCT SPECIFICATION

Description	AI Pedestrian and VRU Detector
Technology	AGD Optical Vision with AI
Detection Zone	10m x 3m (polygon with up to 30 points)
Mounting Height	3-6m (3.5m nominal)
Power Supply	24V ac/dc or PoE
Power	7W
Wi-Fi Frequency/ Power	2412-2472 MHz Highest EIRP power in the range (dBm): 19.7'
Detect Output	Dual opto / Ethernet
LED Indication	LEDs for detect and Wi-Fi connection
Frame Rate	4Hz
Housing Material	Black polycarbonate / Aluminium
Sealing	IP66
Operating Temp	-34°C to +74°C
Configuration	Secured AGD Touch-Setup
Low Light	Inbuilt IR for low light
Dimensions	W 217mm x D 75mm x H 174mm
Weight	1200g
Complies with	EMC: BS EN 50293:2012, EN 301 489-17, EN 301 489-1 Health & Safety: BS EN 62368-1, EN 50556, EN 62479 Spectrum: EN 300 328 RoHS: EN 63000

DIMENSIONS



TESTED AND AGD CERTIFIED

All AGD products are tested, calibrated and AGD Certified so customers know that all devices will perform exactly as described.

AGD® SAFER GREENER **MORE EFFICIENT**

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