

# AGD 650

DUAL ZONE STOP-LINE DETECTOR

**AGD**<sup>®</sup>  
PRODUCT SOLUTIONS FOR  
INTELLIGENT TRAFFIC SYSTEMS

Smart, Optical, Dynamic  
Environment Vehicle Detection

Dashboard-650



## Delivering robust vehicle detection data at the stop-line of multi lane approaches

The AGD650 stop-line detector is a smart, optical, dynamic environment detector that makes intersections and junctions more efficient by delivering robust vehicle detection data at the stop-line of multi lane approaches.

The 650 has inbuilt artificial intelligence and makes use of a new neural processing platform and sophisticated algorithms to provide ultra-reliable real-time detection and automated decision making on vehicle types, including bicycles and scooters.



Traffic & Pedestrian Control



*safer, greener, more efficient*

[agd-systems.com.au](http://agd-systems.com.au)

THE  
TRAFFIC  
GROUP

# AGD 650

## DUAL ZONE STOP-LINE DETECTOR

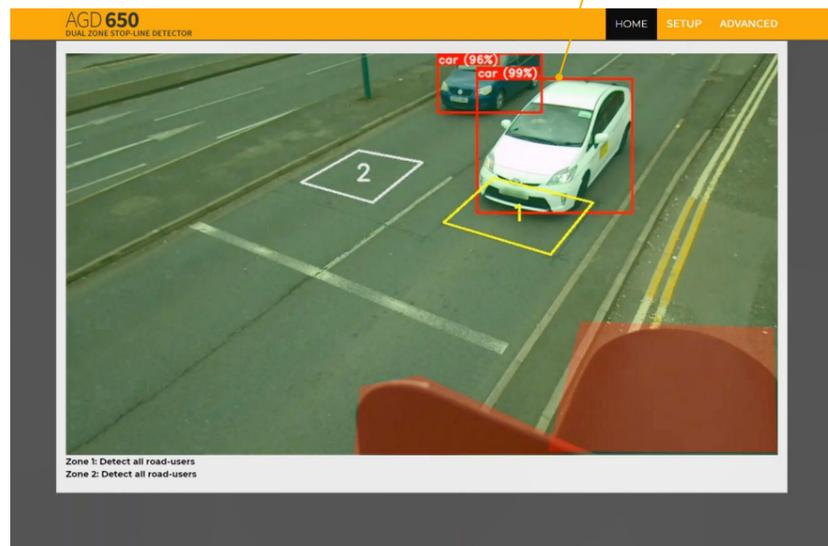
### Smart, Optical, Dynamic Environment Vehicle Detection

With in-built artificial intelligence (AI) it is a high performance product that processes information on board with a new neural processing platform and sophisticated algorithms for automated decision-making to provide ultra-reliable detection.

The AGD650 employs high grade optics and deep learning image recognition to detect stationary and moving targets as they approach the stop-line. The neural net has undergone extensive training to develop a library of vehicle types. Objects that are not defined within this library are simply ignored.



High percentage confidence of target type



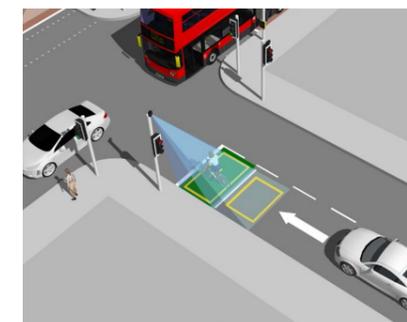
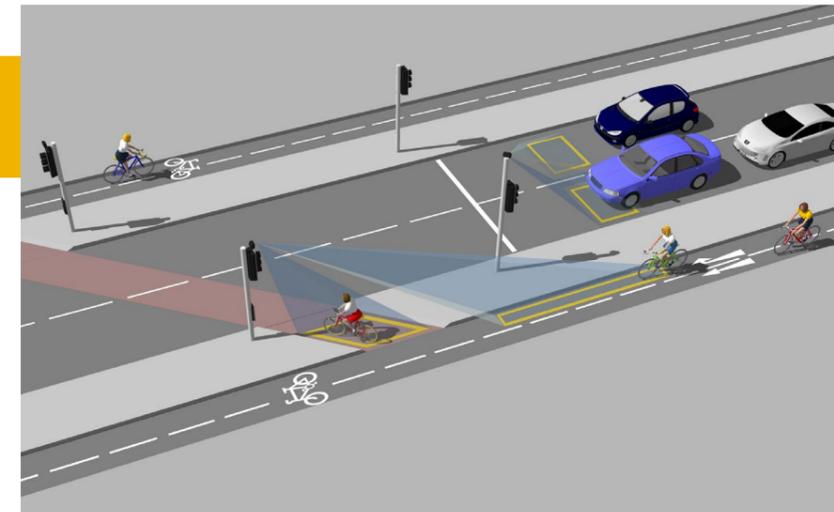
### Direct communications with ITS control rooms



This exciting platform will have future capability to support the needs of smart cities by exporting detailed information about target types. The IP, POE, real-time video, capabilities will be accessed 'down the wire' straight into ITS control rooms - empowering truly informed decision making.



Intelligent capture of non 4 wheeled vehicles



### Applications

#### Features

- Detection of moving & stationary targets at the stop-line
- Two independent user adjustable detection zones
- Deep learning image recognition allows for prioritisation of vehicle types
- In-built AI aids target differentiation
- WiFi AGD Touch-setup - speeds installation & reduces risk

### WiFi AGD Touch-Setup with Quick-zone set-up

The AGD650 is quick to setup using any WiFi device - smart-phone, tablet or laptop - with its unique & secure AGD Touch-setup that allows installers to configure the device in three simple steps:

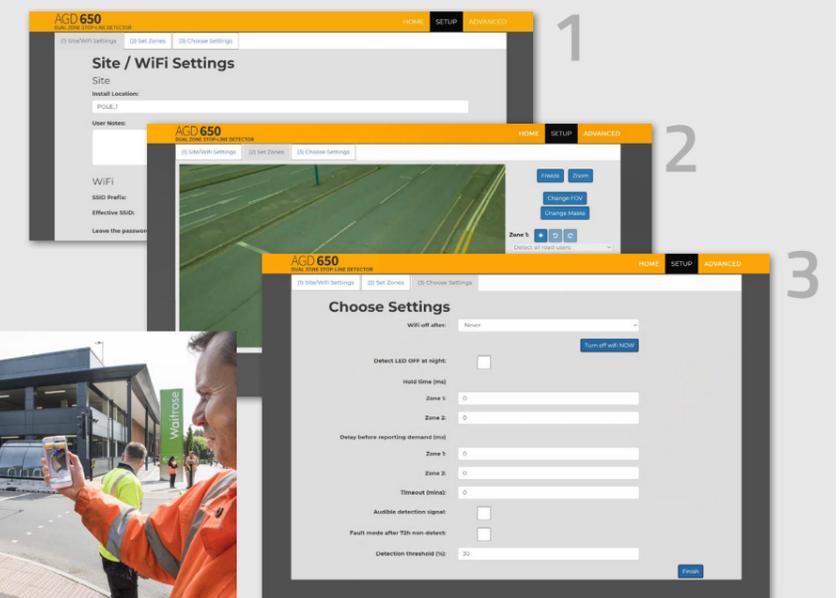
1. Name device
2. Select and set virtual loops
3. Save settings

Multiple AGD detectors may be setup at the same time from a safe position on the ground, or in a vehicle up to 50m away. Conveniently, the AGD650 can be adjusted for zone changes just as quickly in the same way.



### AGD Touch-setup

WiFi 3-CLICK TOUCH-SETUP



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# AGD 650

## DUAL ZONE STOP-LINE DETECTOR

### Technical Data

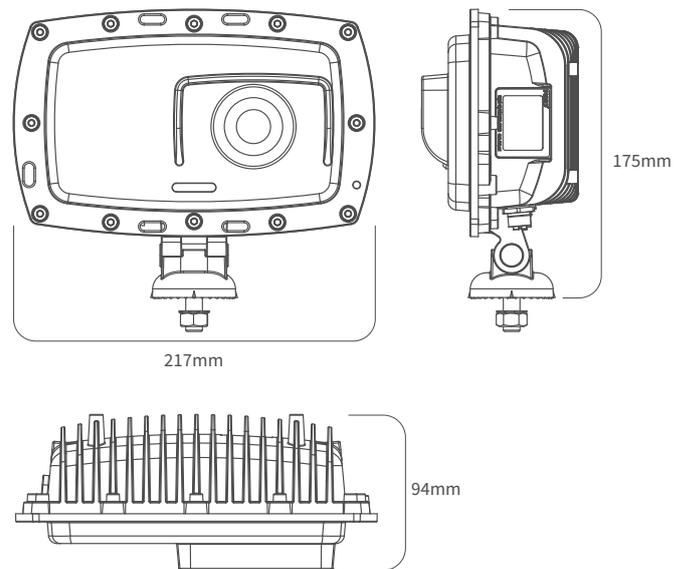
SPECIFICATIONS	
<b>Description</b>	Dual Zone Stop-line Detector
<b>Technology</b>	AGD Optical Vision with AI
<b>Detection Zone</b>	Dual Virtual Loops
<b>Mounting Height</b>	3-6m Nominal
<b>Power Supply</b>	24/42V ac/dc
<b>Power</b>	12W @ 24Vac (740mA) / 24Vdc (440mA) / 42Vac (530mA)
<b>WiFi Frequency/ Power</b>	2412-2472 MHz / Highest EIRP power in the range (dBm): 19.7'
<b>LED Indication</b>	LEDs for detect and WiFi connection
<b>Frames per second</b>	7.5
<b>Housing Material</b>	Black Polycarbonate / Aluminium
<b>Range</b>	20m at full FOV / 30m at reduced FOV
<b>Ingress Protection</b>	IP66
<b>Operating Temp</b>	-25°C to +60°C
<b>Configuration</b>	WiFi AGD Touch-Setup
<b>Lux Level</b>	Operates down to 20 Lux
<b>Dimensions</b>	W 217mm x D 94mm x H 175mm
<b>Weight</b>	1200g
<b>Complies with</b>	EMC (Art 3.1(b)): EN50293:2012 EN301 489-17 V3.2.4 EN301 489-1 V2.2.3 Health & Safety (Art 3.1(a)): EN IEC 62368-1:2020+A11:2020 EN 50556:2011 EN 62479:2010 Spectrum (Art 3.2): EN 300 328 V2.2.2 ROHS: EN IEC 63000:2018 Other: TOPAS 2505B Appendix E
<b>Patent No.</b>	Patent Pending

Owing to the Company's policy of continuous improvement, AGD Systems Limited reserves the right to change their specification or design without notice.

The smart optical AGD650 with AI and target recognition provides even greater performance at the Stop-line than its predecessor the AGD316 radar used on thousands of sites worldwide. The future IP capable AGD650 is the ideal detection solution for multi lane intersection approaches in smart city environments.



### 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.



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