

# AGD650

## Al Multi Modal Detector

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









## **KEY 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 Al aids target differentiation
- WiFi AGD Touch-setup speeds installation & reduces risk

AGD<sup>®</sup> SAFER GREENER MORE EFFICIENT



Al Multi Modal Detector



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.



#### 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. High percentage confidence of target type



Intelligent capture of non 4 wheeled vehicles -



# AGDTOUCH

WIFI 3 Click Setup

## WIFI AGD TOUCH-SETUP

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.





## Al Multi Modal Detector

### PRODUCT SPECIFICATION

Patent No.	Patent Pending - GB2619098
	Appendix E
	ROHS: EN IEC 63000:2018   Other: TOPAS 2505B
	EN 300 328 V2.2.2
	Spectrum (Art 3.2):
	EN 50556:2011 EN 62479:2010
	1:2020+A11:2020
	Health & Safety (Art 3.1(a)): EN IEC 62368-
	EN301 489-1 V2.2.3
	EN30293.2012 EN301 489-17 V3.2.4
Complies with	EMC (Art 3.1(b)): EN50293:2012
Weight	1200g
Dimensions	W 217mm x D 94mm x H 175mm
Lux Level	Operates down to 20 Lux
Configuration	WiFi AGD Touch-Setup
Operating Temp	-34°C to +74°C
Ingress Protection	IP66
Range	20m at full FOV / 30m at reduced FOV
Housing Material	Black Polycarbonate / Aluminium
Frames per second	6.7
LED Indication	LEDs for detect and WiFi connection
WiFi Frequency/Power	2412-2472 MHz / Highest EIRP power in the range (dBm): 19.7'
Typical power at 20°C	2024 onwards (>= MI-220-8): 10.5W @ 24V ac; pre-2024 (<= MI-220-7): 12W @ 24V ac.
Power Supply	24V ac/dc, 42V ac
Mounting Height	3-6m Nominal
Detection Zone	Dual Virtual Loops
Technology	AGD Optical Vision with Al
Description	Al Multi Modal Detector

#### TESTED AND AGD CERTIFIED

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

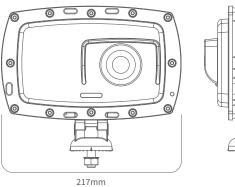


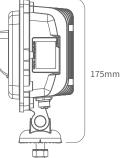
#### SAFER GREENER MORE EFFICIENT

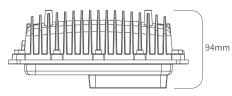
**AGD Systems Limited** White Lion House, Gloucester Road Cheltenham, GL51 OTF, UK

Tel: +44 (0) 1452 854212 Email: info@agd-systems.com Web: agd-systems.com

### DIMENSIONS









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.