

318

VEHICLE DETECTION

Radar Traffic Detector



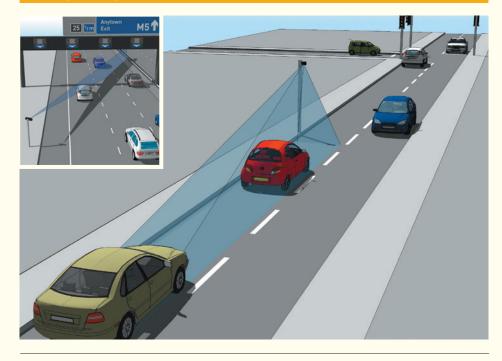
This product has been designed for the detection and monitoring of vehicles in single or multilane environments.

The 318 FMCW radar operates in the 24GHz band. Vehicles are tracked individually as they approach / recede from the radar which provides range, speed, count and occupancy measurement for simultaneous multiple targets. Real time traffic data is passed to the host system via the serial RS422 interface or opto-isolator detect outputs. This flexible platform lends itself to strategic detection and congestion management on the highway.

- Non-intrusive vehicle radar detection
- Multi-target acquisition platform
- Modern, compact stand-alone detector
- Radar reports speed and range to each event



### RANGE, SPEED, OCCUPANCY MEASUREMENT

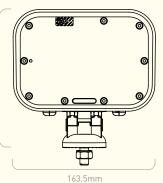


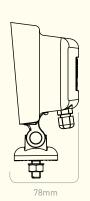
### **FEATURES**

- · Flexibility of deployment in single or multilane environments
- User adjustable parameters for range and speed thresholds
- Individual target tracking
- Can discriminate between approaching and receding targets
- Speed measurement from 4-300 kph across multiple lanes (dependent on variant)
- Range reported to within 0.1m
- Configurable via Bluetooth GUI or RS422
- 12Vdc / 24Vac/dc / 230Vac supply options
- Opto Isolator / High speed RS422 serial comms output options

#### **DIMENSIONS:**







## **SPECIFICATIONS**

Technology	FMCW Radar Technology
Range	From 6m to 150m
Detect Output	Opto, Relay, RS422
Mounting Height	1-5m nominal
Housing Material	Black polycarbonate
Sealing	IP65
Operating Temp	-20°C to +60°C
Power	225mA / 2.7W @ 12Vdc
Approved to:	ETSI EN 301489 BS EN 50293 ETSI EN 300 440 BS EN 60950 FCC (Part 15)



# 318 TESTING PROCESS



**HYPERION** EQUIPMENT:

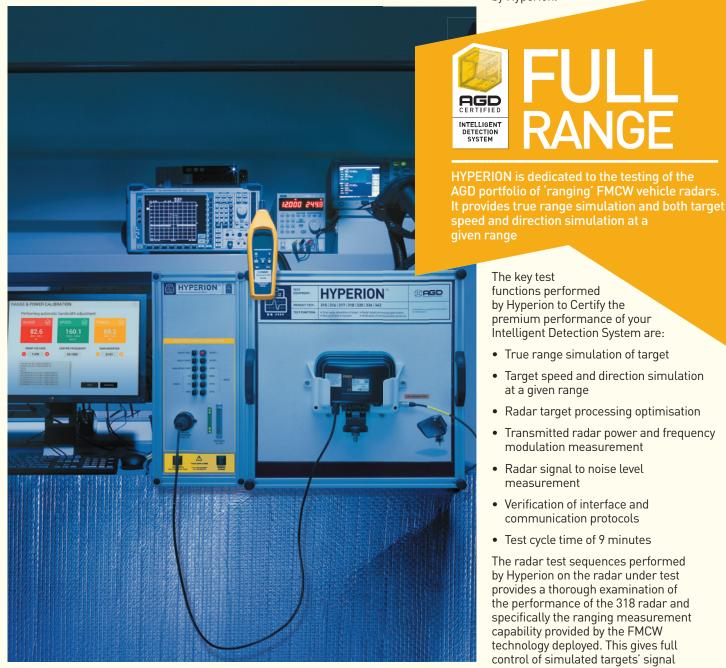
PRODUCT TEST:

TEST FUNCTION:

True range simulation of target
Radar target processing optimisation
Test cycle time 9 minutes
Verification of communication protocols



**Hyperion**™ is a bespoke set of test equipment designed and developed by AGD Systems. It is dedicated to the testing of the AGD portfolio of 'ranging' FMCW vehicle radars. 100% of the 318 units manufactured at AGD are Certified by Hyperion.



### LIFETIME PRODUCT TRACEABILITY

There are clearly defined pass and fail criteria at all stages within the Hyperion test process. The test results in association with the product build revision are recorded on a product serial number basis. The full suite of test measurements is instantly sent to the dedicated product database within the AGD secure server facility, providing full traceability during the product lifetime.

The AGD Certified symbol is your mark of assured performance.

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The key test functions performed by Hyperion to Certify the premium performance of your Intelligent Detection System are:

- True range simulation of target
- Target speed and direction simulation at a given range
- Radar target processing optimisation
- Transmitted radar power and frequency modulation measurement
- Radar signal to noise level measurement
- · Verification of interface and communication protocols
- Test cycle time of 9 minutes

The radar test sequences performed by Hyperion on the radar under test provides a thorough examination of the performance of the 318 radar and specifically the ranging measurement capability provided by the FMCW technology deployed. This gives full control of simulated targets' signal size, speed, direction and range.

Verification of Bluetooth communication and serial interface protocols are performed during the test cycle.

Optimisation of frequency signals on Hyperion ensures full compatibility with country requirements within the 24GHz radar operating band.





