



MAV®

ANPR TECHNOLOGY FOR
INTELLIGENT TRAFFIC SOLUTIONS

MAV MOBILE ANPR

**PROVIDING A COMPLETE VEHICLE
BASED ANPR SYSTEM**



Modular high definition vehicle based ANPR System

MAV's latest vehicle based Full HD (1080p) ANPR system is a modular solution that has been developed to offer multi-sector capabilities with efficiency, accuracy and reliability at its core.

The package utilises the proven MAV FlexiAi ANPR software running on a new generation of vehicle certified mobile computers. Each vehicle can be configured to use up to 4 cameras depending on user requirements. Building on the reputation of MAV's mobile cameras, the offering employs SabreHD cameras for internal daytime/headlit operations and/or external RapierIP day/night IR based cameras.

The full HD resolution cameras are designed to read number plates at 5-25m with up to 10m lane coverage. Built-in FlexiAi provides high speed vehicle targeting for multilane and high-speed use. Designed at MAV to support a range of parking and traffic applications, including the provision of vehicle make, model and colour data, this resilient solution offers multiple communication methods. Optimised to provide efficient communication with back offices and MAV's ANPRonline cloud service, this solution enables hotlist support and options for Secure Encrypted Local Hotlists, and Secure Online Hotlist Exchange (e.g. NPED Secure).

Operation

The MAV mobile system can be used to discreetly gather ANPR data for analysis, identification and vehicle movement. Development of multilane operations offers three-lane field of view coverage for ANPR reads simultaneously and accurately. The MAV mobile system is able to operate in low light environments without additional illumination as well as read licence plates at acute angles and challenging vehicle positioning.

Set up

The MAV mobile system can be quickly and discreetly deployed into vehicles using a local network/WiFi connection for ease of configuration via web-based devices. Designed to operate on a wide voltage range, it is highly resilient, ruggedised and robust for operating in extreme environments. High performance is complimented by flexibility as the system is simple to move between vehicles. The mobile computer is internally equipped with integrated GPS, cellular data and local WiFi, eliminating the need for ancillary installation items.



Solutions

MAV's mobile system offers a multitude of benefits for a wide range of specific solution requirements:



Law Enforcement

Offering high performance, accuracy and hotlist integration, the system provides law enforcement with access to consistent vehicle monitoring, identification of criminal/suspect transport and vehicle tracking for behavioural analysis.



Bailiffs

With efficient identification of parked and transiting vehicles, the system uses superior FoV to improve system performance in multiple vehicle locations. This includes travelling around roundabouts, acute angular parking and road positioning. With such high performance standards bailiffs have greater ability and flexibility to identify vehicles of interest.



Road Surveys & Analysis

Offering extensive meta-data packets, the system provides opportunities for in-depth analysis in-line with survey result requirements and analytical reporting. Offering vehicle count as well as make, model, colour data options, the system offers stand-alone and integration benefits for multiple applications.



Smart Parking Enforcement

The intelligent MAV Mobile system offers an efficient and highly accurate solution for smart parking enforcement. With multi-read comparisons and AI based 'best match' technology the system offers enhanced revenue generation opportunities and vehicle behavioural analysis.



Using the system

The MAV mobile system offers access to analysis and results via tablet view and can be integrated with third party systems for hotlist activations, hotlist exchange, in-vehicle displays, in-vehicle video recording and BOF activations via a designated API.



OFFICIAL SUPPLIER
NPED

MAV

Part of
THE TRAFFIC GROUP

MAV Mobile

FLEXIAI HIGH SPEED VEHICLE TARGETING FOR MULTILANE

Technical Data

CAMERA SPECIFICATION

Recognition Range	Capture of up to 10m of traffic lanes from 5 to 25m
Connectivity	4-Channels of HD 1080p/60fps video over up to 100m cable (supports up to four cameras)
Cameras	MAV SabreHD 3MP with 4x Zoom or external RapierIP with additional IR, both supporting three lane recognition
IR illumination	LED arrays with lenses (850nm standard. White light, 740nm or 940nm optional)
Day Night Mode	OV/IR Automatic Day Night Mode
Camera Control	Integrated web server provides full camera and illuminator setup pages and live preview from any connected browser whilst stationary

ANPR ENGINE FUNCTIONALITY

ANPR Processor	NVIDIA® Jetson Orin AGX for high performance ANPR capability
ANPR Software / Presets	MAV FlexAI - In-vehicle ANPR System
ANPR Engine Protocol	Supports JSON, UTM, BOF2 WEB Services, NPED Secure File Exchange, Helix, FTP & ONVIF(m)
ANPR Metadata	Multiple plate tracking with IDs, full availability of plate movement/size data through field of view
ANPR Storage	Onboard storage 250GB (optionally 500GB) for up to 1 million buffered reads & DVR Video or RTSP streams
ANPR Features	Image cropping options for Overview image, advanced de-skew and yaw correction, character spacing validation, country of origin matching, lane determination, direction of travel, plate tracking and geometry.

PHYSICAL SPECIFICATIONS

Operating Voltage	9~36V DC-in with ignition control & OCP/OVP. Optional UPS available for stable operation through ignition/voltage dips.
Memory	64GB standard
Connections	Dual WiFi, Dual LTE (5G optional), GPS/GNSS, integrated Dual SIM Slots, 6x LAN RJ45 Ports with POE, 3D accelerometer/gyro-scope/G-Sensor, USB, RS232.
Dimensions	214 x 168 x 83mm
Weight	2.5kg excluding mounts
Enclosure	IP67 rugged and fanless casing, MIL-STD-810G
Temperature / Humidity	-30°C to 70°C operating with relative humidity 0%RH to 100%RH (hermetically sealed)

SERVICE

Customer Service	Friendly, helpful service for product ordering and repair returns
Standards	Comprehensive pre and post-sale technical support for full life of the product
Warranty	12 month warranty, extended warranties and factory repair/replacement programmes available
Long Term Supply	Complete support for the life of the product
Training	Comprehensive product training programmes for customers

Note: All lane width and multilane capability statements in this brochure are based on 850nm IR for standard UK license plates and UK infrastructure - some variation should be expected for smaller international plates or wider traffic lanes.