

## Powerful ANPR camera



### KEY FEATURES

- ▶ All-integrated, running the engine inside the camera
- ▶ Easy to install with motorized lenses and autofocus
- ▶ PoE+ capability to reduce installation cost
- ▶ Video stream provided in real time (RTSP)
- ▶ Dry contact to directly control barrier

The CT45 camera is optimised for the following applications:

- ▶ Parking
- ▶ Access Control
- ▶ Security
- ▶ ITS

### High Quality Imaging

The CT45 camera provides HD video for high-accuracy ANPR used in parking, access control, security and ITS applications. The 2MP sensor provides detailed images of passing licence plates. The high resolution enables capture of the most challenging plates including those with half-height and stacked characters. It is available with 850nm illumination, which allows clear and crisp licence plate images to be produced 24-hours a day.

The camera is based on a powerful quad core 1.2GHz processing platform and uses Linux operating system for maximum stability and robustness.

### On-board Jet Recognition Engine utilizing deep learning

All the HD video is processed inside the camera by the Jet Recognition Engine using our latest advances in deep learning, with no need to send high bandwidth video across the network to high-powered external process PCs. The integrated engine is supported by our in-house development team.

### JMS Software

When combined with the JMS software, users are able to experience a complete parking management and access control system. The system allows:

- ▶ Car park counting
- ▶ Automated access/Barrier control
- ▶ Alarm management
- ▶ Ticketing integration

PART NO. INFORMATION	DESCRIPTION
174500, ANPR Camera	3-25m range with IR and overview
10719, JMS	ANPR Management Application software including 8 connection licences

## TECHNICAL INFORMATION

### License Plate Recognition

Recognition Distance	:	From 3m to 25m (motorized lens for zoom and focus control)
Coverage Width	:	Up to 7m
Recognition Engine	:	TagMaster Jet Recognition Engine - a Linux based embedded real-time AI engine running on a quad core Cortex A35 processor @ 1.2GHz
Recognition Framerate	:	25 fps
Recognition Direction	:	Both (Front and rear)
Max Vehicle Speed	:	> 65km/h (40mph) (Shutter speed 1/25 <sup>th</sup> – 1/16,000 <sup>th</sup> s)
Triggering	:	Free running (no trigger) – Software Trigger – Hardware Trigger
Confidence Ratio	:	Yes
Recognition JPEG	:	Yes
Square Plate Formats Supported	:	Yes
Countries Supported	:	Europe and US
Other Data Supplied	:	Coordinates of plate, direction, country

### Video and Illumination Features

Lighting	:	10 strong IR LEDs (850nm)
CMOS	:	HD 2MPixels 1/2.8" sensor
Compression	:	H.264 or MJPEG
Transport Protocol	:	RTSP (over http), TCP/IP and FTP
Available Settings	:	Framerate, bitrate, resolution, quality

### Electrical Characteristics

Power Supply	:	24-48V DC, PoE+ IEEE 802.3at
Power Consumption	:	Average 18 W, max 25W

### Mechanical Characteristics

Weight	:	2.95 kg
Dimensions (LxWxH)	:	290 x 180 x 102 mm
Material	:	Aluminium
Coating	:	Traffic grey, RAL 7043
Water & Dust Protection	:	IP66
Connectors	:	Amphenol RJ45, Amphenol 8-pin M12, SMA connector for Wi-Fi antenna
Operating & Storage Temperature	:	-40°C to +60°C, 0%-95% Relative Humidity

### Security, Environmental and Technical Certifications

Security	:	HTTPS
Photobiological Safety	:	IEC 62471
Homologation	:	IEC 62368-1, Electrical Safety General IEC 60950-22, Electrical Safety Outdoor EN 55022:2010, Emissions EN 55024:2010, Immunity IEC 60068-2-27 Ea, Shock IEC 60068-2-64 Fh, Vibration UL94 HB, Flammability 2002/95/EC, 2011/65/EU, 2015/863, RoHS/RoHS2/RoHS3
Time Synchronization	:	NTP protocol

### Data Input and Output

TCP/IP	:	Yes
HTTP	:	Yes
FTP	:	Yes
Ethernet	:	10/100Mbps Ethernet interface, PoE+, Wi-Fi for easy setup
Wiegand	:	Built-in support for Wiegand
Input	:	1
Output	:	2 relay dry contact
Other Protocols	:	UTMC, REST, XML, JSON and other formats through templates

Due to TagMaster's continuous effort to develop the products in response to customer needs, the above specifications are subject to change.