



DUNCAN
SOLUTIONS

**INTEGRATED PARKING & GUIDANCE TECHNOLOGIES
FOR SMART CITIES**



Global city populations and their associated economic growth are skyrocketing, and the urban environment is becoming more complex by the minute.

One detrimental side effect of this civic expansion is an increase in traffic congestion, which has made navigating through and parking in cities a particularly frustrating and stressful task. Indeed, research confirms that during peak hours, up to 30% of all vehicles are circling, searching for a vacant space to park. But help is now at hand.

Duncan Solutions is a leading provider of intelligent parking management solutions, with more than 80 years of experience in the industry. With offices all across Australia and installations around the world, the Duncan team designs, manufactures and integrates a range of parking, guidance and compliance technologies that assist civic engineers and management to identify and optimise city parking availability and traffic flow.

WHAT WE DO

Our Parking Enterprise Management System (PEMS), combined with multiple best-in-breed software and hardware solutions, delivers real 'Smart City' benefits to civic parking authorities:

- Efficient parking turnover that increases footfall to local businesses.
- Accurate guidance to available parking that reduces circling, congestion, pollution and accidents.
- Guided enforcement that improves the oversight for parking enforcement officers.
- Automated business intelligence data collection and reporting.
- Advanced parking behaviour analysis.
- Influencing driver behaviours through dynamic pricing and other 'intelligent' parking strategies.

Duncan's intelligent parking management solutions are currently used by local and federal government authorities, universities, entertainment centres, hospitals and national park services across Asia, Australia and New Zealand.

REAL BENEFITS

Unlike other new technologies hitting the market, PEMS is truly transformative. It brings oversight to an aspect of civic management that has been notoriously non-transparent throughout the years.

While the governing body deploying PEMS gains a number of invaluable advantages, the end users also benefit from the introduction of an integrated Parking & Guidance solution:

- Live updates on available parking spaces for on and off-street facilities that can be accessed on smart phones and via digital signage.
- A range of payment options for convenience.
- Reduced time spent looking for a park.
- Alerts that inform when a park is about to expire, and enable the driver to top up remotely.

As the world grows more digitally advanced, PEMS delivers the smartest, most adaptable parking and guidance solution for today, and for the future.



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INTELLIGENT PARKING

The search for parking comes with a number of distractions; when a driver is on the hunt for available spaces, he or she also has to be mindful of pedestrians, traffic signs, and other vehicles and their passengers.

Duncan's Intelligent Parking platform removes complexity and uncertainty from the equation for both parking enforcement officials and end users. Through a range of hardware solutions and software applications, PEMS provides live updates on available parking spaces, simplifies the payment process and helps officials closely monitor their jurisdiction.

The Intelligent Parking platform is open source and can consist of any of the following components:

- Parking Enterprise Management System (PEMS) for administration and reporting.
- SDRO-certified digital AutoISSUE solution for parking and all local law infringement/expiation issuance.
- Pay-by-space, pay-by-plate, pay and display, pay-by-phone, digital wallet and online portal payment options.
- Wireless sensor technology for vehicle detection.
- Mobile and fixed licence plate recognition (LPR) cameras for on- and off-street parking management.
- Aggregated navigation for end user through third party guidance and mapping tools (EasyPark, Parkmobile, Parkopedia, Google) and in-field digital signage.

'Smart City' strategies and the 'Internet of Things' are quickly gaining traction because of the improvement to the user experience, and the efficiencies that a more interconnected metropolitan area can bring. A limitless amount of information is now available, but only with the right technology in place. The subsequent benefits are tangible and have a substantial impact:

- Accurate navigation of drivers to available spaces reduces congestion, accidents and pollution.
- Reliable enforcement improves compliance and increases parking turnover in favour of maximising foot traffic to local businesses.
- Optimised parking availability due to enhanced motorist compliance.
- Parking officers better equipped for enforcement with highly accurate information.
- Better safety for pedestrians and drivers.
- Maximised revenue for civic management.
- Increased aggregation of business intelligence data.
- Interconnectivity to the Internet of Things.

As the world population steadily grows, mobility in high-traffic metropolitan areas will become a luxury without a strategy in place to facilitate the ease of movement. Without technology to manage it, congestion and a lack of available parking spaces squeezes local businesses and distorts the appeal of an area or precinct.

Using intelligent parking technology law enforcement officials receive the tools they need to effectively enforce compliance and change parking behaviour, drivers are afforded the guidance and simplicity they've always wanted, and local businesses benefit from increased vehicle turnover and a regular flow of new customers.



Through a range of hardware solutions and software applications, PEMS provides live updates on available parking spaces.



PARKING ENTERPRISE MANAGEMENT SYSTEM

The future of parking lies in the digital revolution. Space availability is delivered to drivers seamlessly in real-time, parking is paid for at the tap of a finger and enforcement officials are dynamically notified of any infractions.

None of this is possible without intelligent and comprehensive technology supporting it. Duncan Solutions' Parking Enterprise Management System (PEMS) is unique and innovative. It collects, analyses and reports data through interconnectivity between 'smart' hardware and software applications.

Live transmission of this information benefits end users, parking enforcement officials and authorities by providing oversight and transparency in key aspects of parking availability, compliance infringement and driver/traffic behaviours.

What is PEMS?

Through technology made possible by the Internet of Things (IoT) - the foundation of today's smart cities - PEMS allows civic managers to gain greater oversight and administration over city parking while simultaneously providing end users with a worthwhile application that improves their experience.

As the only truly integrated asset management and reporting system available today, PEMS facilitates a number of capabilities through real-time data collection from:

- Digital parking infringement issuance technology.
- Parking meters and pay-by-phone services.
- On- and off-street vehicle sensors.
- Licence plate recognition (LPR) cameras.
- Parking navigation applications and digital signage.
- Field service management solutions.
- Dynamic operational and financial control dashboards.
- In-road loop vehicle count technology

By integrating any of the hardware and software applications listed, actionable business intelligence data can be continuously gathered to support:

- Accurate financial and operational auditing.
- Reliable financial forecasts for future budgetary actions.
- Proactive equipment maintenance.
- Better understanding of movement within the proximity as it relates to construction, local businesses and general traffic flow.
- Predictive usage/occupancy/availability.

PEMS provides a powerful and intuitive Intelligent Parking platform for an idea that's simple by nature, but complex in practicality. The technology handles the aggregation of interconnected data through wireless sensors and automatically generates relevant reports and analysis for parking enforcement officials, while providing drivers with real-time navigational assistance to available parking.

In the age of cybercrime, data security is of paramount importance - especially pertaining to financial records. Duncan Solutions maintains Tier 1 Payment Card Industry Data Security Standard (PCI-DSS) certification across PEMS and all of its enterprise management system architecture - the highest level of data security processes and protocols available.



PEMS allows civic managers to gain greater oversight and administration over city parking.

PEMS

PARKING ENTERPRISE MANAGEMENT SYSTEM

Duncan Solutions' open source Parking Enterprise Management System (PEMS) facilitates the real-time transmission of digital parking transaction, occupancy, availability, and guidance data between multiple technologies and applications.

Duncan's PEMS benefits three specific user groups:

Management

LGA's and Authorities that deploy PEMS gain an acute oversight of their parking and compliance operation, specifically as it pertains to business intelligence data collection and analysis. A user-friendly web application allows for the seamless and simultaneous management of thousands of parking meters, wireless sensors, in-field applications, cameras, and signage that:

- Improves accessibility for residents and visitors.
- Optimises occupancy/availability..
- Displays current and historical parking and driver compliance trends, and predicts future usage.
- Delivers up to the minute data to traffic engineers and other civic planners.

Parking officials

PEMS provides enforcement staff with improved transparency into parking compliance across their site. When integrated with the AutoISSUE infringement issuance system, officers can manage overstays and other acts of non-compliance in the most effective and efficient way.



Clients that deploy PEMS gain acute oversight for asset management, specifically as it pertains to business intelligence data collection and analysis.

The transmission of real-time data via PEMS to staff in the field will deliver the following benefits for parking officers:

- Officer efficiency is optimised as they are guided to only those vehicles that do not comply.
- In-field auditing of permits, smart phone payments, and discounts with ease.
- Maximise officer routing to better manage parking hot spots.
- Reassign officers to school zones and fringe residential 'problem areas' that traditionally have not been able to be effectively monitored due to time-consuming chalking/ticket inspection.
- More accurate information allows officers to make better decisions on the go.
- A single infringement evidence report compiling relevant data from all assets, for use in court.

End users

Perhaps the greatest benefactor is the average citizen - PEMS aggregates navigational applications and information on space availability to directly guide end users to vacant spots. This reduces circling, and removes the frustration from civic parking.

An intelligent, integrated parking and guidance system provides the following outcomes for residents and visitors:

- Improves the driver experience.
- Reduces the amount of frustration, congestion, pollution and accidents that circling for a park creates
- Provides more convenient ways to pay, top up, and avoid infringements
- Increases access to shopping and business activities
- Provides parking availability ahead of time that assists drivers to better plan when they make their trips

At its core, PEMS delivers unparalleled parking availability and compliance visibility that simply can't be gained or managed through other systems.



PAYMENT SYSTEMS

A third of all parking transactions are still paid in cash (and due to an ageing population, probably will continue for some time), but payments via smartphones, credit cards and digital wallets are on the increase and make the payment process easy and simple.

Meter payment options

Duncan's TX and VX multi-space parking machines can support three different parking methodologies:

- **Pay-and-display:** Issues a physical ticket that must be placed on the vehicle's dashboard to confirm that parking has been paid for.
- **Pay-by-plate:** Drivers register their licence plate number using an alphanumeric keypad and pay for their stay in a defined zone.
- **Pay-by-space:** Drivers register the number of the space that they parked in using a numeric keypad.

Each machine integrates directly with PEMS, pay-by-phone applications, and sensors, and data from the meters can be displayed on officer handhelds and field maintenance crew smart phones.

Coin, Credit and Debit

Each of our TX and VX parking machines feature a coin payment option and a secure, end-to-end credit card processing solution that is compliant with the Payment Card Industry Data Security Standards (PCI-DSS), the Visa Cardholder Information Security Program (CISP) and the Mastercard Site Data Protection (SDP) program.

Cardholder information security is essential when processing any type of financial or consumer information, which is why all TX and VX parking machines are equipped with EMV-certified

Multicard Magtek I-65 readers that accept chip-based contact and magnetic strip payments and meet ISO 7810, 7811 and 7816 specifications.

Duncan's parking machines can also accommodate digital wallet and contactless tap-and-go transactions, and are ISO 14443 compliant and certified for EMV level 1 and 2.

Duncan parking machines integrate to three different gateway providers, and a range of banking institutions, allowing Authorities choice when selecting the most competitive processing fees.

Pay-by-phone

With approximately 97 per cent of Australians using smartphones, paying for parking via a mobile application has never been easier. Duncan Solutions enables payment via the 'easy to use' Parkmobile and EasyPark apps, either as standalone implementations or integrated to our parking machines.

All pay-by-phone transactions are recorded in PEMS, and can be reported on along with cash and credit card payments.

Where permitted, drivers can easily top up using their smart phone applications, and can receive alerts when their parking session is about to expire.

Duncan Solutions' deliver the widest choice of parking payment options for drivers, and support accurate and secure financial transacting and auditing or Authorities.



Duncan parking machines integrate to three different gateway providers, and a range of banking institutions, allowing Authorities choice when selecting the most competitive processing fees.



TX MULTI-SPACE PARKING MACHINE

The TX multi-space machine is instantly recognisable as Australia's most popular parking meter. Designed and manufactured in Australia, Duncan's TX machine is easy to use, highly adaptable, and can be used in both on-street and off-street parking scenarios.

Features

The TX parking machine runs on either solar panels and batteries, or mains power, and can be configured for pay-and-display, pay-by-plate or pay-by-space options, as preferred.

Equipment resiliency is provided by its sturdy stainless steel exterior and is backed with a 10-year anti-corrosion warranty. The TX connects to the Parking Enterprise Management System (PEMS) to allow for seamless transmission of occupancy and financial data to the web-based client portal for retrieval.

The TX parking meter offers:

- Credit and debit, coin, smart card, smartphone, pay-by-phone and digital wallet payment capability.
- Wireless transmission through 3G/LTE-M.
- Integration with automated infringement issuance, licence plate recognition (LPR) cameras, navigational applications and digital signage.
- Payment Card Industry Data Security Standards (PCI-DSS) and EMV certification.
- Permit and discount management.

Through PEMS integration, civic management can access the following information:

- Historical data on collected revenue.
- Occupancy turnover based on time, date, meter and zone for statistical analysis.
- Transactional data, and predictive usage.
- Revenue figures by type – coin, credit card, phone, discount, permit, etc.

Functionality

With an intuitive step by step process and simple instructions provided on the screen, the TX parking meter was designed with a quick, user-friendly experience in mind.

The equipment offers unparalleled flexibility, with the ability to accommodate loading zone tickets, resident discount options, configurable free parking intervals, and multi-day purchases.

Along with PEMS integration, the TX parking meter can be deployed in tandem with wireless sensors, LPR cameras, infringement issuance devices and other monitoring tools.

Each machine can automatically alert staff when maintenance is needed, and Administration can change tariffs and configurations across multiple TX parking meters seamlessly using the web-based client portal.



Duncan's TX machine enhances the driver experience by accepting a wide variety of payment options, it can be configured as 'pay and display', 'pay by plate' and 'pay by space' depending on operator or motorist preferences.



VX PAY-BY-SPACE PARKING METER

The VX pay-by-space parking meter is an innovative and intuitive machine that is manufactured in Australia and has been recognised for its award winning design.

Built with a blend of cutting edge technology and an easy-to-use interface, the VX meter can be fully integrated with Duncan Solutions' Parking Enterprise Management System (PEMS) and a range of in-field vehicle monitoring devices.

Features

The VX meter can be powered by either a solar panel- and a battery or mains power, is housed in a durable stainless steel exterior, and comes with a 10-year anti-corrosion warranty.

It's designed for simplicity with the end user in mind, is considerably smaller in height and width than other paid parking machines, and is fully integrated with PEMS to facilitate:

- Seamless transfer of transactional and occupancy data to the web-based client portal.
- Discount and permit management options
- Tight integration with vehicle sensors, enabling dynamic pricing and wiping of inherited time.

The VX parking meter differs from conventional meters in a number of ways:

- Costs less than competing machines.
- Ticketless parking saves thousands on the annual cost of paper and reduces pollution.
- Supports coin, credit and debit, pay-by-phone and digital wallet payments.
- Reduced maintenance costs.
- Smaller form factor that looks smarter in the street.

Functionality

The VX pay-by-space parking meter has a sleek and modern design, but the greatest innovation lies in its ticketless system.

By removing the need to place a ticket on the dashboard signifying the driver has paid for his or her spot, administrations provide a few advantages:

- People no longer need to walk back to their vehicle, reducing the possibility of a pedestrian being involved in an accident.
- Parking enforcement officials no longer have to manually check every spot, as they receive real-time updates on occupancy and overstays.
- The meter can be topped up remotely via pay by phone applications.

Cardholder security is of paramount importance in this day and age of cyberattacks - the VX's compliance with Payment Card Industry Data Security Standards (PCI-DSS) and EMV certifications provide customers with peace of mind.

Along with PEMS integration, the VX parking meter can be deployed in tandem with wireless sensors, LPR cameras, infringement issuance devices and other monitoring tools.

Each machine can automatically alert staff when maintenance is needed, and Administration can change tariffs and configurations across multiple VX meters seamlessly using the web-based client portal.



the VX parking meter can be deployed in tandem with wireless sensors, LPR cameras, infringement issuance devices and other monitoring tools.



TX PAY-AND-DISPLAY UPGRADE KITS

Get the most out of your conventional MX, PSA or Cale parking meters by integrating Duncan's cutting edge TX technology. Clients can upgrade their conventional meters with a TX pay-and-display upgrade kit for considerably less cost than a brand new machine.

Features

Ideal for on and off-street parking machines, the TX upgrade kit is defined by its simple installation, user-friendly interface and reliable consistency and uptime.

Seen as an affordable alternative to purchasing new TX parking meters, the upgrade kit extends the life of conventional MX, PSA and Cale meter housings and delivers additional capabilities:

- Pay-by-phone, coin, credit and debit card, smartphone, digital wallet and smart card payment options.
- Remote discount and permit management through a web-based client portal.
- Payment Card Industry Data Security Standards (PCI-DSS) and EMV certification.
- Wireless transmission through 3G/LTE-M.

Functionality

The TX pay-and-display upgrade kit allows civic managers to integrate Duncan Solutions' powerful Parking Enterprise Management System (PEMS) at a fraction of the cost, yet benefit from all of the flexibility and performance a brand new meter would offer.

The TX upgrade kit connects to PEMS, and gives clients more options and features:

- Transactional occupancy for navigational applications.
- Integration with pay by phone applications.
- Integration with the Field Maintenance System, facilitating immediate response and optimal uptime.
- Comprehensive online auditing and reporting suite.

Cardholder security is of paramount importance in this day and age of cyberattacks - the TX upgrade kit's compliance with Payment Card Industry Data Security Standards (PCI-DSS) and EMV certifications provide customers with peace of mind.

The world is going digital; it's time your conventional MX, PSA and Cale parking machines do the same.



Refresh your existing PSA and/or Cale machines with state-of-the-art TX functionality, at a low cost. Upgrade to the latest Pay and Display (Ticket) capability, or configure for Pay by Space or Pay by Plate.



PAY-BY-PHONE

Smartphones have become an all-inclusive device. You can shop, read and keep in touch with old friends - all while having your morning cup of coffee.

And in a city equipped with intelligent parking technology, drivers can use their phones to navigate to vacant spaces in real time, send payment from their cars, and top up while shopping or in a business meeting.

The future is here today, with Parkmobile and Duncan Solutions' Parking Enterprise Management System (PEMS).

Pay-by-phone features

Parkmobile, a partner with Duncan Solutions, is the world's most popular pay-by-phone service. It is fully integrated with our powerful parking asset management platform, PEMS.

Pay-by-phone affords drivers the ability to quickly identify available parking spots using dynamic navigational guidance, and pay for their parking without having to approach a meter.

Other features include:

- Seamless integration with PEMS and the AutoISSUEinfringement issuance application.
- Seamless integration with Duncan TX and VX parking machines.
- No minimum balance lets drivers to pay for what they need and nothing more.
- Remote top-up management to facilitate payment in unexpected, extended periods of stay.
- Pay-upfront and stop-start payment methods available.
- Simple and easy-to-use interface.

Parkmobile is available through the Android, iOS, Windows and Blackberry app stores, making it one of the most widely accessible mobile applications on the market.

With nearly 97 per cent of Australians currently using a smartphone, it's time to provide them with added convenience and functionality when they park.



Pay-by-phone affords drivers the ability to quickly identify available parking spots using navigational guidance to avoid distracted driving.



AUTOISSUE INFRINGEMENT ISSUANCE SOLUTION

Duncan Solutions' AutoISSUE infringement issuance application has been carefully refined over the past 30 years and is now an integral component of the Parking Enterprise Management System (PEMS).

Parking enforcement officials face difficult tasks every day on the job, particularly when it comes to the monitoring of vehicle compliance and the issuance of infringement notices. Efficiency has always been elusive, but AutoISSUE provides officers with an effective digital administrative tool.

AutoISSUE features

The AutoISSUE infringement issuance application collates real-time data from a range of in-field capture points, including parking machines, vehicle sensors, pay by phone programmes, licence plate recognition cameras, permit programmes and Council databases, and displays it in a contemporary user interface that empowers officers to make quick, correct enforcement decisions.

Key features of the AutoISSUE application include:

- User-friendly UI that facilitates the efficient management of parking, abandoned vehicles, permits, littering, animal control, building inspections and health and safety laws.
- Real-time transmission of infringements back to base.
- Ability to attach voice recordings and images to digital tickets.
- Tight integration with Samsung smart phones and small, robust Bixolon Bluetooth printers
- Criminal and traffic offence modules.
- State Debt Recovery Office (SDRO) certified.
- Optional modules include 'plate look up', 'officer guidance', 'meter status look up', 'permit look up', 'QR code look up', and 'bar code printing/reading'.

Functionality

Optimised for the Android operating system, AutoISSUE has been deployed on Samsung Note and Galaxy smartphones and tablets for several years. Bluetooth connectivity offers the ability to pair the device with Bixolon SPP200II printers.

Officers access intuitive ticket templates via a home page in their AutoISSUE application. Following simple process flows and only completing information where it is required, the officer quickly completes infringements and issues them in the field. Where possible, data is prepopulated into each ticket, either from the previously expiation, or from parking meter, pay by phone, vehicle sensor, or LPR data transmitted in real time.

While the physical act of issuing a ticket stays the same, a wireless receipt is sent and accounted for in PEMS, where it can then be exported to 3rd party management and/or processing systems for collections and record-keeping.

AutoISSUE yields the following benefits:

- Pre-populated field data improves efficiency, which generates time and cost savings.
- Greater administration and oversight over infringement issuance.
- Guaranteed file transfer to ensure zero loss of citations.

As a core component of PEMS, AutoISSUE allows clients to improve the productivity of parking enforcement officials while gaining greater oversight over compliance infringement and revenue.



The AutoISSUE infringement issuance application collates real-time data from a range of in-field capture points.



VEHICLE DETECTION SENSORS

Guidance for drivers and parking officers requires a very high degree of accuracy, and very low latency. The correct information must be displayed quickly and consistently to both user groups.

Duncan Solutions' vehicle detection sensors have been tried and tested in numerous cities and environments and are developed with the highest level accuracy and fastest response times in mind.

As a key component of our Parking Enterprise Management System (PEMS), our vehicle detection sensor technology has a proven track record of more than 99 per cent accuracy. That is, the sensors correctly detect the arrival, and corresponding departure, of all vehicles 99 per cent of the time. This is in stark contrast to competing sensor products, whose accuracy is based on the correct writing of infringements, not the accurate detection of vehicles.

As importantly, 98% of all sensor detection data is transmitted to PEMS within a few seconds of it occurring. This is then sent on wirelessly to officer handheld displays, digital signage, and mobile guidance applications, where it can be referenced moments later for compliance and/or navigation purposes.

Vehicle detection sensor features

Vehicle detection sensors seamlessly integrate with Duncan's TX and VX parking meters and AutoISSUE infringement technology, and are vital components in providing detailed reporting and analysis for PEMS. Key features include:

- Dynamic pricing capability through parking meters or pay-by-phone.
- 99% vehicle detection accuracy and 98% of events displayed within 30 seconds.

- Captures and transmits occupancy data live to AutoISSUE, PEMS and mapping and navigational applications.
- Supports guidance assistance to non-compliant vehicles for parking enforcement officials.
- Utilises time-of-flight radar technology.
- Proven in court to provide legal and admissible evidence for citation cases.

Capable of being implemented in both on- and off-street parking sites, the vehicle detection sensors are reliable assets for any civic manager looking to create a smarter parking infrastructure.

Functionality

The vehicle detection sensor is placed in the ground in the centre of the parking space, from where it continuously monitors and tracks the movement of vehicles around the clock. Data is streamed to gateways and on through to PEMS where information and events are accurately logged in accordance to the time of day, location of the parking bay, time restrictions in place, and the entry and exit of every vehicle. PEMS then determines if a parking infringement has occurred, records it, and sends immediate information to officers in the field to refer to.

The sensors utilise very little power. This is supplied by batteries that are warranted to last for four years. The sensor's casing is composed of resilient, strengthened plastic and is also provided with a four-year warranty.

Vehicle detection sensors support parking enforcement officials by eliminating the labour intensive, manual efforts required to periodically check and chalk restricted time parking. By streaming vehicle detection data in real-time, drivers receive crucial guidance to available spaces, thereby reducing congestion and the frustration of circling for parks, and parking officials and administration can monitor their municipalities remotely and with high accuracy, whilst developing valuable business intelligence data along the way.



LICENCE PLATE RECOGNITION

Duncan Solutions provides both fixed and mobile licence plate recognition (LPR) cameras as an alternative to traditional, time-consuming chalking methods.

Integrated with Duncan's Parking Enterprise Management System (PEMS), our vehicle mounted mobile LPR cameras can continuously monitor restricted parking zones throughout the day, accurately capturing licence plate images at parallel, 45°, 60° and 90° parking angles.

LPR camera features

By switching to LPR's highly efficient digital chalking method, Authorities are able to significantly reduce their operational costs and improve productivity among their existing parking enforcement personnel. The LPR system captures legal evidence that clearly proves vehicles have overstayed beyond the permissible time allowed - this information is permissible in Court.

The fixed and mobile cameras feature:

- Industry-best centimetre-accurate GPS, with a successful read rate at up to 50 kilometres per hour.
- Automated zoning feature, eliminating the need for a second staff member to be in the car.
- Two- and four-camera configurations.
- Simultaneously logs licence plate numbers, captures large, clear images, and checks the plates against warrants, stolen vehicles and permits lists.
- Clear image processing for reflective and non-reflective Australian licence plates.
- Can track up to 1,000 plates per hour.

Duncan Solutions' mobile LPR cameras come fully integrated with PEMS and other key components such as AutoISSUE, TX Pay By Plate parking machines, and vehicle detection sensors.

Functionality

The mobile LPR camera, which attaches easily to the roof rack on a Council vehicle,

Utilises an onboard Video Processing Unit (VPU) and wireless communication technology to automatically render and transmit captured plate images and supporting data to the back end management system and the in-car Android tablet for immediate parking enforcement use.

With security always at the top of everyone's mind, administration can rest easy knowing all data communications are secured through an APN SIM card. Streaming is facilitated through 3G, 4G, and Wi-Fi networks.

Ongoing technical service and support is available, as are various warranties that suit clients' specific needs.



LPR Cameras provide another level of oversight, reducing stress, frustration and potential injuries that can be brought on by traditional chalking methods.



SERVICE AND SUPPORT

The Duncan team recognises that our clients require regular help and assistance.

As such, service and support from our experts is available 24 hours a day, 7 days a week to ensure your parking, compliance and guidance programme is always up and running and performing at its best.

Real people, real solutions

Our support and service offerings include:

- Experienced staff ready to assist with any of Duncan's many parking and enforcement applications.
- Proactive and reactive in-field maintenance strategies.
- Friendly, responsive Australian-based service agents who are available around the clock.
- A digital task management system that creates a job number for each client.

Duncan Solutions' is committed to giving clients the best hardware, software and service in the industry, which is why we have a policy of regularly following-up to ensure everything is in working order.

A comprehensive range of warranties for both our hardware and software is available, all of which can be configured to meet your specific needs.

CONTACT INFORMATION:

Office hours (Monday-Friday, 8 a.m. to 6 p.m. EST)

Phone: 1800 332 929
support@duncansolutions.com.au

After-hours and emergencies
Phone: 02 9432 0508
dispatch@duncansolutions.com.au



DUNCAN
SOLUTIONS

**INTEGRATED PARKING & GUIDANCE TECHNOLOGIES
FOR SMART CITIES**

OFFICE LOCATIONS:

15/39 Herbert Street, St. Leonards, NSW 2062

9/15 Thackery Road, Port Melbourne, VIC 3207

27 Bruce Street, Nedlands, WA 6009

G5/169 Newcastle Street, Fyshwick ACT 2609

20-30 Hartley Street, Cairns City, QLD 4870

ABN: 75 079 147 201

1300 727 596

sales@duncansolutions.com.au

KEEP IN TOUCH, FOLLOW US ON:

