LevantaPARK

TECHNICAL SPECIFICATION
STORE PARK

OMER®

SMART SOLUTIONS FOR VEHICLE PARKING AND CAR STORAGE

TECHNICAL SPECIFICATION STORE PARK

StorePARK is an OMER designed system that provides both vertical and horizontal movement to ensure the maximum number of vehicles can be parked in either 2 levels or 3 levels. These types of system are often referred to as Semi Automatic.

The parking bays are accessed from ground level. All bays must be access independently to each other. The platform of the upper and lower levels moves vertically, while the platform of the ground level moves horizontally.

At ground level there will always be one parking space less then both the upper or lower levels. This allows the ground level platforms to slide to left or right in order to create the free room to lower the upper platforms or raise the lower level platforms.

Consequently, a unit of three (2 levels) or five (3 levels) parking bays is the smallest system available. The model is supplied with doors, electrically or remotely opened. The parking place selection is done via a touch screen or remote control, connected to the control panel. As soon as the system receives the code, it automatically moves the platforms in order to position the required platform in front of the selected door.

After opening the door, positioning the vehicle on the platform and then closing the door the system is ready for another operation. To retrieve a car, the sequence is similar and always through a code dialed or remote controller used by the operator.

For safety reasons, the platforms only move when the doors are locked; When the door is in the closed position it is monitored by electrical sensors. The system can be sized according the customer requirements and fitted with optional devices, such as car dimension controls.

SPECIFICATION TABLE

Model Number	Capacity*	Max. Car Height	Max. Car Dimensions	Clearance between columns (standard)**	Standard Pit Depth	Horizontal Moving Power Supply	Lifting Power Supply***	Ascent / Descent Time	Notes
LP-SP1850 1.1	2000 kgs	1800mm	2200 mm x 5000 mm	2300mm	2200 mm	0.35 kw	2.2kw	30 secs	
LP-SP1850 2.0	2000 kgs	1800mm	2200 mm x 5000 mm	2300mm		0.35 kw	2.2kw	30 secs	
LP-SP1850 2.1	2000 kgs	1800mm	2200 mm x 5000 mm (4800mm)	2300mm	2200 mm	0.35 kw	2.2kw	30 secs	
LP-SP2050 1.1	2000 kgs	2050mm	2200 mm x 5000 mm	2300mm	2450 mm	0.35 kw	2.2kw	34 secs	
LP-SP2050 2.0	2000 kgs	2050mm	2200 mm x 5000 mm	2300mm		0.35 kw	2.2kw	34 secs	
LP-SP2050 2.1	2000 kgs	2050mm	2200 mm x 5000 mm (4800mm)	2300mm	2450 mm	0.35 kw	2.2kw	34 secs	

* All products have an option to increase capacity to 2,500 kgs. It is recommended that all Store PARK products with 2100mm heights utilises the 2500 kgs weight capacity
** Useable platform width can be increased to 2400mm. This additional width adds an extra 200mm between the columns.
***Lifting Power Supply increases to 3.5 KW on all models with 2500 kgs capacity

BENEFITS OF STORE PARK

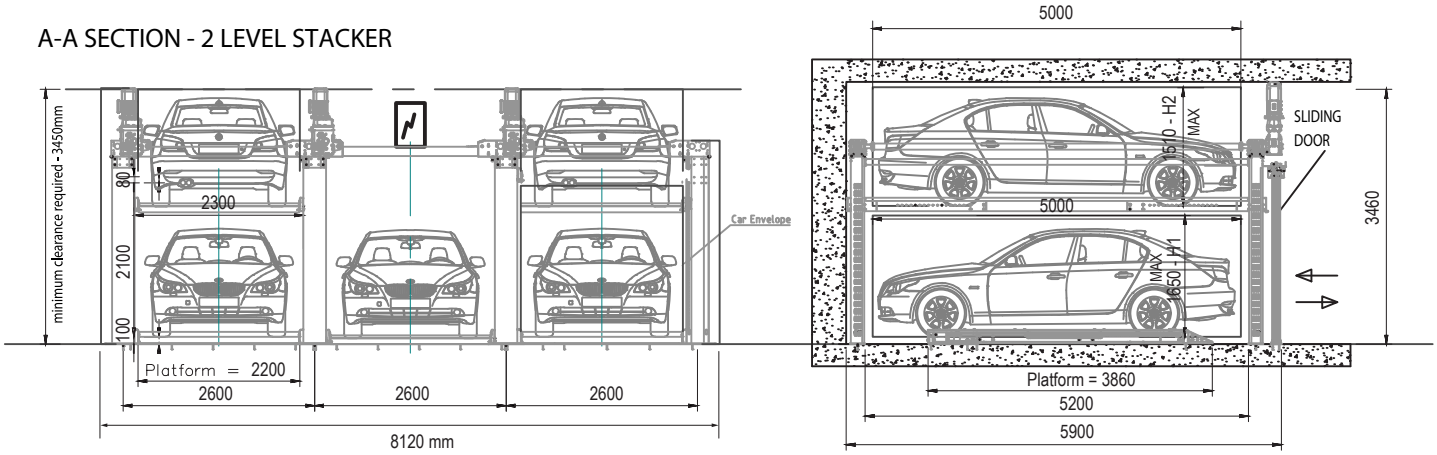
- Upper, ground and lower level platforms are made of hot dipped galvanised platforms making a smooth, user friendly platform
- Adjustable wheel stops assist the driver to find the correct position of the car
- The Store-PARK structure is completely self-standing. No structural walls are required to support the system.
- All cables and motor are placed on the upper beams making it easier to install while providing lower maintenance costs
- Every module has torsion bars to ensure the platform constantly rise at an even rate regardless of where the weight is positioned on the platforms
- Every upper platform has an additional mechanical safety lock in case of chain failure. In the event of chain failure the mechanical lock will immediately activate the hook onto the column rack.
- The gates are manufactured from anodised aluminium structure to ensure light weight, long life and quite movement

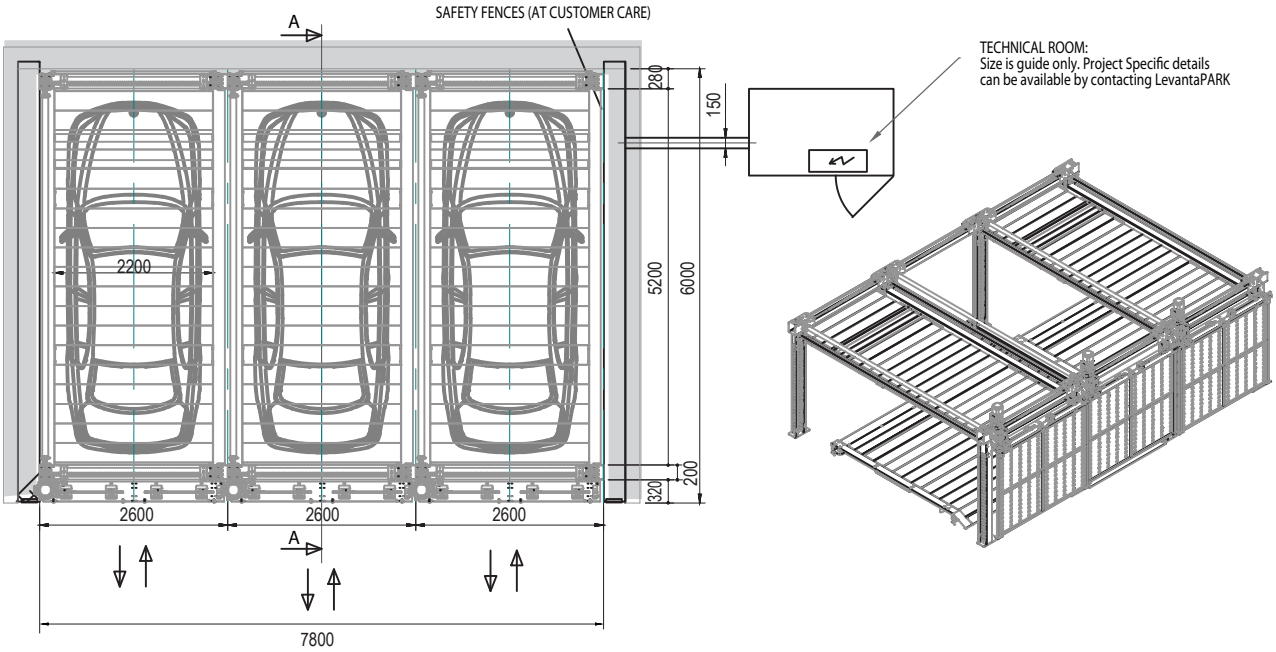
MEASUREMENTS/DIMENSIONS ARE IN MILLIMETER (MM)

P:1300 993 548 W levantapark.com.au E: enquiries@levantapark.com.au

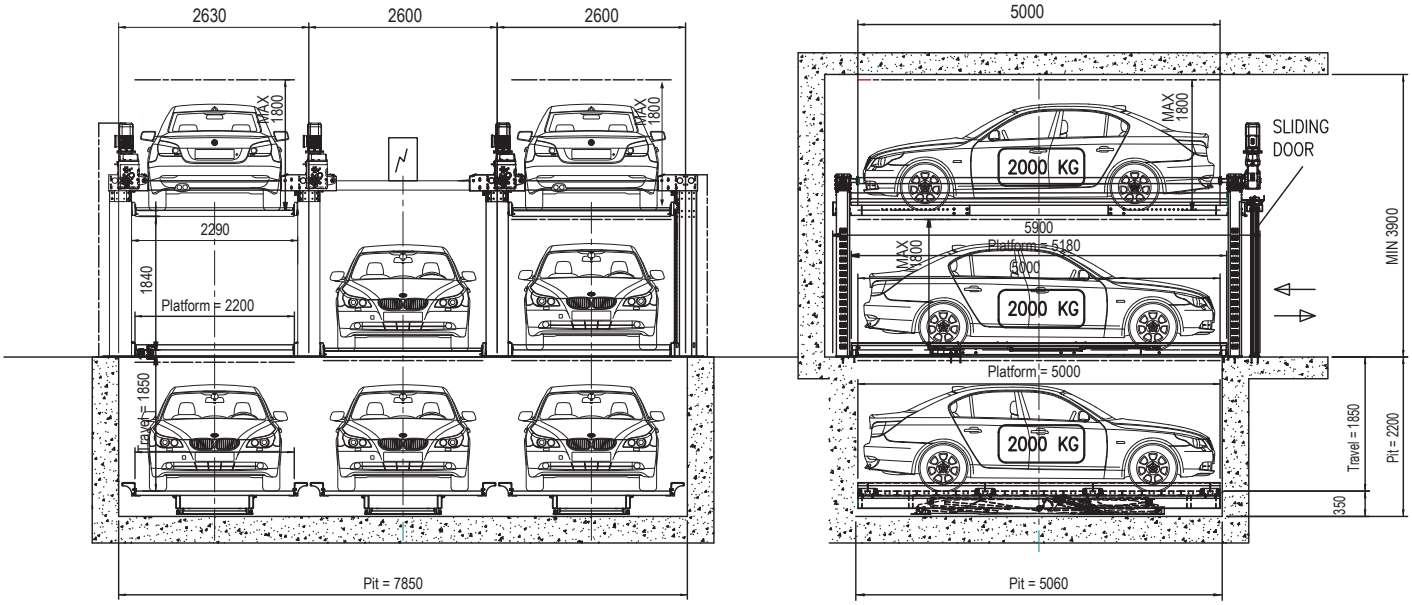
Standard Type LP-SP1850 2.0

A-A SECTION - 2 LEVEL STACKER





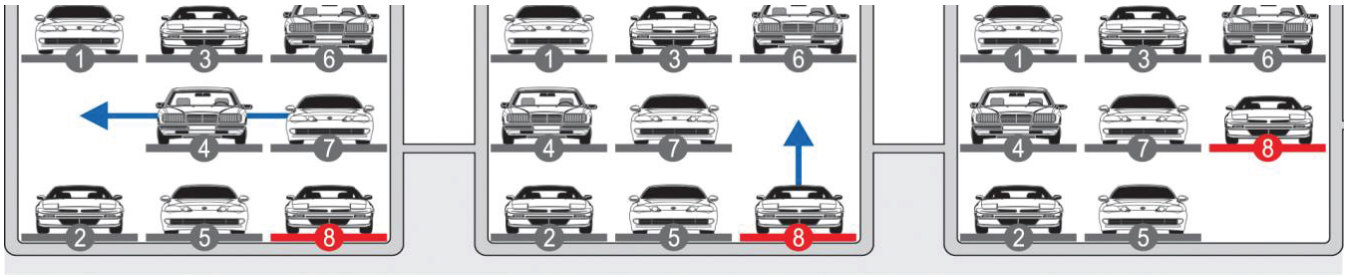
A-A SECTION - 3 LEVEL STACKER- LP-SP1850 2.1



MEASUREMENTS/DIMENSIONS ARE IN MILLIMETER (MM)

Function of the Store Park - Model LP-SP (Version) 2.1

Select No. 8 on operating panel. Check first that all doors are closed, then select No. 8 on operating panel.



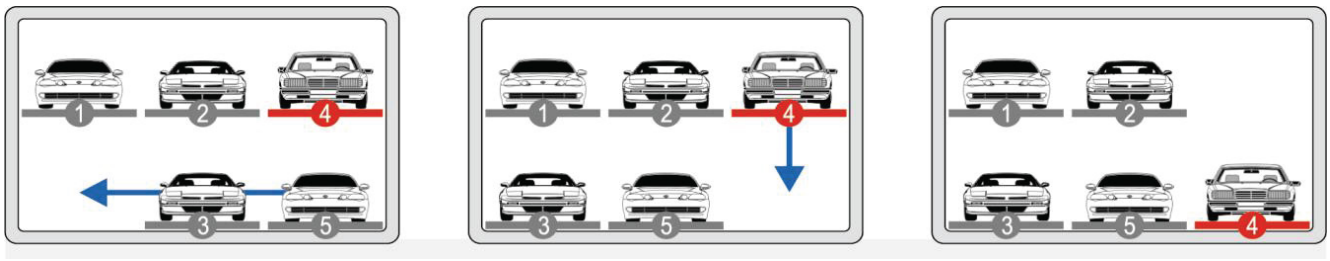
For driving the vehicle off platform No.8 the ground floor parking platforms are shifted to the left.

The empty space is now below the vehicle which shall be driven off the platform. The platform No.8 will be raised.

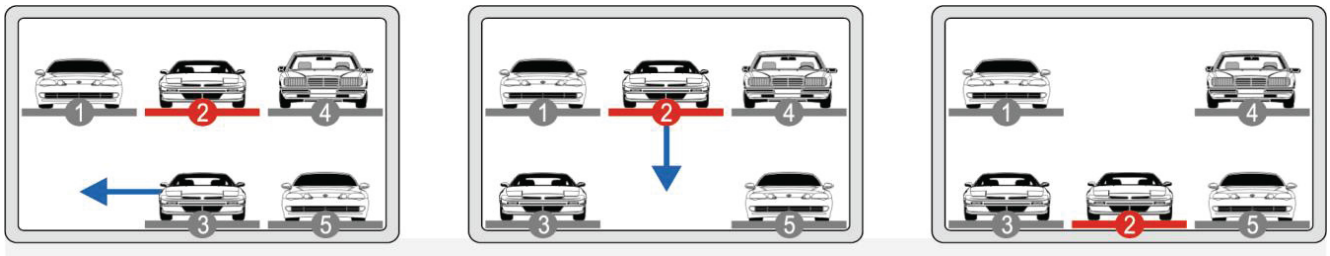
The vehicle on platform No.8 can now be driven off the platform.

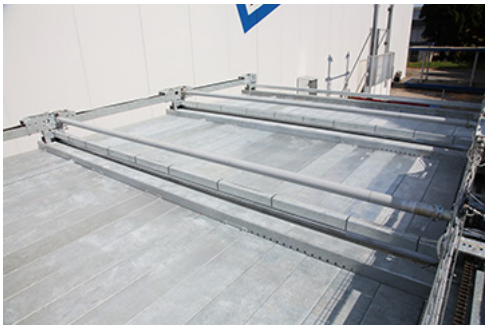
Function of the Store Park - Model LP-SP (Version) 2.0

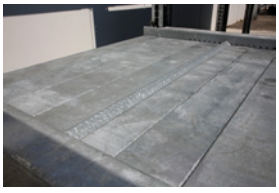
Select No. 4 on operating panel.



Select No. 2 on operating panel.



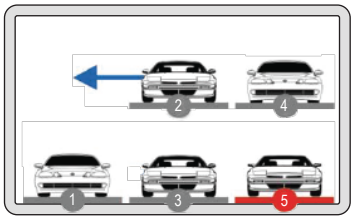




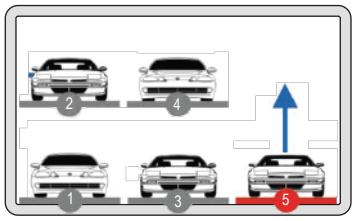
MEASUREMENTS/DIMENSIONS ARE IN MILLIMETER (MM)

Function of Store PARK LP-SP (version) 1.1

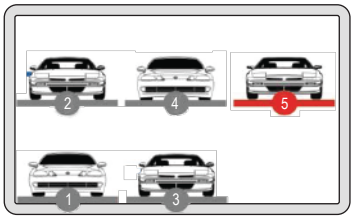
(e.g. for parking space No. 5: Check first that all doors are closed, then select No.5 on operating panel.



For driving the vehicle off platform No. 5, the upper parking platforms are shifted to the left.



The empty space is now below the vehicle which shall be driven off the platform. The platform No.5 will be raised.



The vehicle on platform No.5 can now be driven off the platform.

MOVING DIRECTION

Upper floor	↓	Descending to entrance level
Ground floor	↔	Transverse repositioning
Lower floor	↓	Raising to entrance level

Technical data

Available documents

- Service Levels Agreement
- Building Code and Australian Standards Conformance Documentation

Corrosion protection

All components are electro plated galvanised or industrial powdercoated as standard. Hot Dipped galvanised platforms available upon request

Environmental conditions

Environmental conditions for the area of LevantaPARK Systems: Temperature range -10 to +40° C. Relative humidity 50% at a maximum outside temperature of +40° C. If lifting or lowering times are specified, they refer to an environmental temperature of +10° C and with the system set up directly next to the hydraulic unit. At lower temperatures or with longer hydraulic lines, these times increase.

Electrically driven doors

Commercially or residential used motorised gates and roller doors should be subjected to annual inspections. We recommend including a maintenance agreement that includes the servicing of these components as part of the entire system.

Numbering

The standard numbering of the parking spaces is to be taken from left of the page. Different numbering is only possible at extra cost. Please take note of the following specifications: In general, the empty space must be arranged to the left. The numbers if different from this must be provided at time of ordering.

Sound insulation

According to AS 1217.1, LevantaPark are part of the building services (garage systems).

Normal sound insulation:

AS 1217.1, Sound insulation against noises from building services.

The standard contains permissible sound level values emitted from building services for personal living and working areas. Noises created by users are not subject to the requirements. The following measures are to be taken to comply with this value.

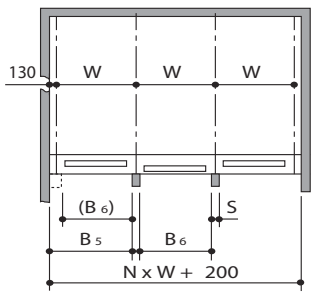
- Sound protection package according to offer/order
- Minimum sound insulation of building R'w = 57 dB (to be provided by customer)

Note: User noises are noises created by individual users in our LevantaPARK Systems. These can be noises from accessing the platforms, slamming of vehicle doors, motor and brake noises.

Widths – Detail X for garages with sliding doors (Standard)

Sliding door in front of columns

Columns per each grid unit (S = 200)



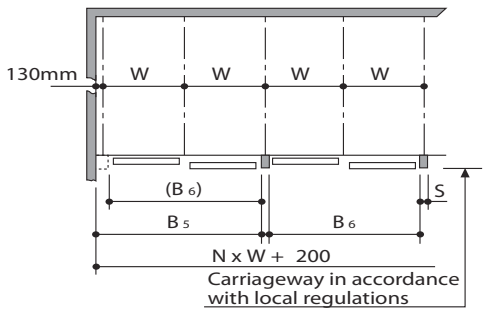
N = number of grid units

usable platform width	Grid unit width W**	B5	B6
2200 *	2600	2500	2300
2400	2800	2600	2400

* Standard width (parking place width on upper platforms 2.20 m).

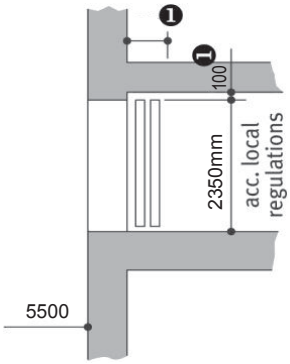
** Grid unit width must strictly conform to dimensions shown.

Columns every second grid unit (S = 200)



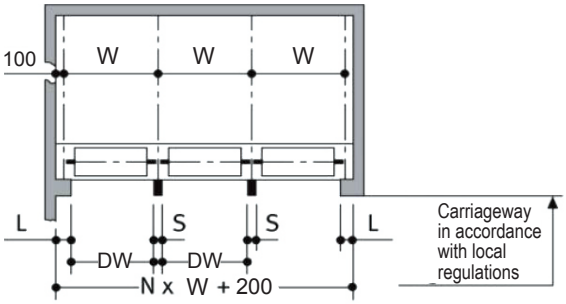
usable platform width	Grid unit width W**	B5	B6
2200 *	2600	5200	5000
2400	2800	5400	5200

* Standard width (parking place width on upper platforms 2.20 m).
** Grid unit width must strictly conform to dimensions shown.



Widths – Detail X for garages with roll doors

Roll door behind columns
Columns per each grid unit

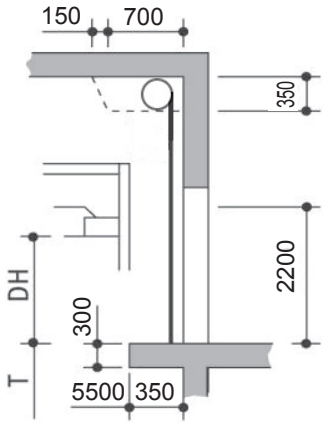


N = number of grid units

usable platform width	Grid unit width W**	Door entrance width DW	L	S
2200	2500	2300	200	200
2400	2600	2400	200	200

* Standard width (parking place width on upper platforms 2.30 m).
** Grid unit width must strictly conform to dimensions quoted!

Detail X



Pit depth T	Clear height DH	Roll door height
2200	1800	2630
2400	2050	3000

- Only applies to manually operated doors. The electrically driven doors must have the following dimensions: 10 > 20 and 25 > 35!
- End parking spaces are generally more difficult to drive into. Therefore we recommended for end parking spaces our wider platforms. Parking on standard width platforms with larger vehicles may make getting into and out of the vehicle difficult. This depends on type of vehicle, approach and above all on the individual driver's skill.

Load plan

Forces in KN can be achieved by contacting the technical support team at LevantaPARK on 1300 993 548

MEASUREMENTS/DIMENSIONS ARE IN MILLIMETER (MM)

Range of application

Generally, this parking system is not suited for short-time parkers (temporary parkers). Please do not hesitate to contact LevantaPARK for further assistance.

Available documents

- Service Levels Agreement
- Building Code and Australian Standards Conformance Documentation

Corrosion protection

See separate sheet regarding corrosion protection.

Environmental conditions

Environmental conditions for the area of LevantaPARK Systems: Temperature range -10 to +40˚ C. Relative humidity 50% at a maximum outside temperature of +40˚ C. If lifting or lowering times are specified, they refer to an environmental temperature of +10° C and with the system set up directly next to the hydraulic unit. At lower temperatures or with longer hydraulic lines, these times increase.

Electrically driven doors

Commercially or residential used motorised gates and roller doors should be subjected to annual inspections. We recommend concluding a maintenance agreement that includes this service for the entire system.

Numbering

The standard numbering of the parking spaces is to be taken from page 4. Different numbering is only possible at extra cost. Please take note of the following specifications: In general, the empty space must be arranged to the left. The numbers must be provided 8 - 10 weeks before the delivery date.

Sound insulation

According to AS 1217.1, LevantaPark are part of the building services (garage systems).

Normal sound insulation: AS 1217.1, Sound insulation against noises from building services.
The standard contains permissible sound level values emitted from building services for personal living and working areas. Noises created by users are not subject to the requirements. The following measures are to be taken to comply with this value.

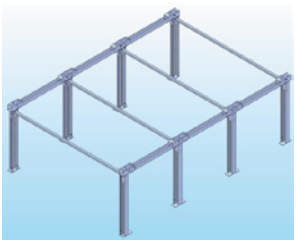
- Sound protection package according to offer/order
- Minimum sound insulation of building R'w = 57 dB (to be provided by customer)

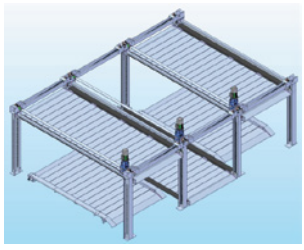
Note: User noises are noises created by individual users in our LevantaPARK Systems. These can be noises from accessing the platforms, slamming of vehicle doors, motor and brake noises.

Framework:

1.1 Steel Framework

The steel framework supporting the upper platform is made by bolted steel elements.
The columns are designed in order to be shared with two modules.
The whole steel framework is self-standing and anchored to the floor by anchoring bolts.



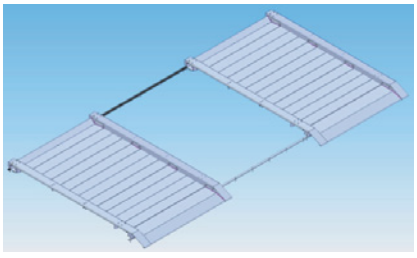


Protection from corrosion has made by a powdered coated painting of the steel frames. The rail and the platform staves are hot dip galvanized.

Lifting device for upper floor (UF) platforms:

1.2 Lower Platform

The lower platform is made by elements bolted together, moved by a mechanism installed on board. The mechanism is driven by an hydraulic cylinder and a pulley chain, that moves a shaped pinion.
The shaped pinion run on a special rack, and the wheel of the platform run on a rail fixed on the concrete slab by anchoring bolts .
The mechanism stops the platform at each single step.
The platforms run on wheels, supported by sealed bearings and guided by rails.
The surface of the platform is flat and hot dip galvanized, for a user-friendly step.
Car wheel stopper is obtained by shaping the front stave of the platform.

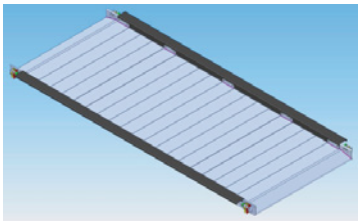


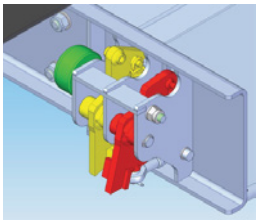
MEASUREMENTS/DIMENSIONS ARE IN MILLIMETER (MM)

1.3 Upper Platform

The surface of the platform is flat and hot dip galvanized, for a user-friendly step
Car wheel stopper are obtained by shaping the front and rear staves of the platform.
The upper platform is lifted by 4 chains, driven by a self braking motor, and guided by sliding pads into the columns.
A torsion bar system along with 4 lifting chains, maintains the platform leveled and stable in all the conditions.

Furthermore, four auxiliary mechanical locks latches automatically the platform every stop.
The locks are controlled by a micro-switch.





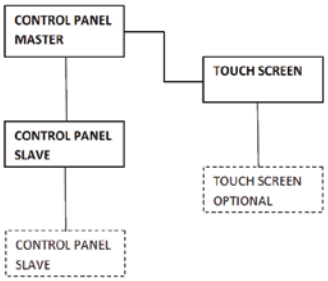
A mechanical lock on each lifting chain, stops the platform in case of a chain failure.

Automatic control system:

1.4 Control Panel

The system is managed by a master electrical control panel and a number of electrical slave panels, wired by a net signal cable and a power supply cable.
The operator manages the system by a touch screen.
User-friendly touch-screen drives the operator trough the parking and retrieval car sequences.
The touch-screen is normally installed on the main control panel, it is suggested to install the touch screen in a position where the operator can have a full view of the system for safety reasons.

Note: LevantaPARK newly adapted phone call system can be provided with any MAX system.
Contact LevantaPARK agents for further details.



Door actuation

Standard:

- Electric drive via electromotor that is mounted to the turning point of the sliding doors. The drive pinion engages into a chain mounted to the door.
- For safety reasons the platforms are only moved when the doors are locked. The "Door open" and "Door closed" positions are monitored via electric sensors.

Alternative:

- Manual, i.e., the door is opened and closed by hand

Framework

- Welded framework with one vertical center bar with stop profiles and wire grating with mesh size of 12mm.

Fill

Standard:

- Wire grating, mesh size: 12mm
- Suitable for outdoor installations

Alternative:

- Trapezoidal sheet metal fill, thickness: 1 mm. Profile of sheet metal is adjusted to door width
- Non-Climbable Fence Mesh - Perforated - 10mm holes
- Wood with vertical profile, Norway spruce, composite slab, thickness: 16 mm, untreated for glazing by customer. Door framework without center bar.
- Fill provided by customer, max. weight: 10 kg/m_2 , max. thickness: 25mm. Fill must contribute to stabilizing the framework. Door framework without center bar.

Running rails

- The running construction consists of one door with twin-pair rollers, adjustable in height
- The running rails for the doors are fixed to the either consoles, concrete lintels or a door suspension provided by the customer by using brackets
- Guiding is enabled by 2 plastic rollers on a base plate that is dowelled to the floor

Corrosion protection

Door framework:

- Shot-blasted (purity: SA 2.5), powder-coated (Epoxy/Polyester base) RAL 7040, dry film thickness approx. 60-80 µ Fill (wire grating, trapezoidal plate):
- Shot-blasted (purity: SA 2.5), powder-coated (Epoxy/Polyester base) RAL 7040, dry film thickness approx. 60-80 µ Grating separation, if necessary:
- Framework with wire grating, mesh size: 12 mm, shot-blasted (purity: SA 2.5), powder-cated (Epoxy/Polyester base) RAL 7040, dry film thickness approx. 60-80 µ. Running rails, brackets, base plate for guiding rollers:
- Electrogalvanized

Please note:

Door covers (on the sides to cover the running rails, etc.) and door suspensions are not part of the standard delivery. They can be ordered as special equipment against additional charge.

We reserve the right to change this specification without further notice

The LevantaPARK company reserves the right in the course of technical progress to use newer or other technologies, systems, derives no disadvantage from their so doing.

To be performed by the customer

Safety fences
Any barriers or screening to be installed directly beside, in front or behind parking pits are to meet Australian standards and will be the direct responsibility of the client unless specified in the offer.

Numbering of parking spaces
Consecutive numbering of parking spaces.

Building services
Lighting, ventilation, fire extinguishing and fire alarm systems.

Building services
Lighting, ventilation, fire extinguishing and fire alarm systems.

Drainage
For the middle area of the pit we recommend a drainage channel which you connect to a floor drain system or sump. (500mm x 500mm x 200mm). The drainage channel can be sloping towards the pit floor but we recommend the pit floor is level. We also recommend oil and petrol separators in any connection to the public sewerage systems

Marking
Marking and identification according to Australian standards must be provided by the client in the environment of the installation. LevantaPARK will provide all marking relevant to the requirements on the system itself.

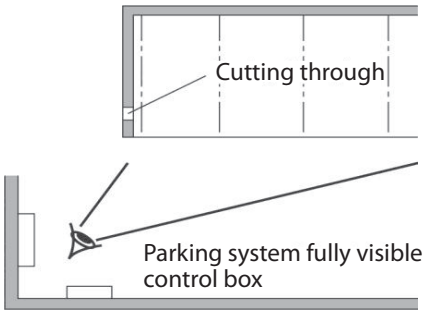
Wall cuttings
Any necessary wall cuttings and penetrations.

Electrical supply to the control box
Suitable electrical supply to the control box must be provided by the customer during installation. The functionality can be monitored on site by our fitters together with the electrician. If this cannot be done during installation for some reason for which the customer is responsible, the customer must commission an electrician at their own expense and risk.

Tolerances
The tolerances for levelness of the driving surface must conform to AS 3600-2100.

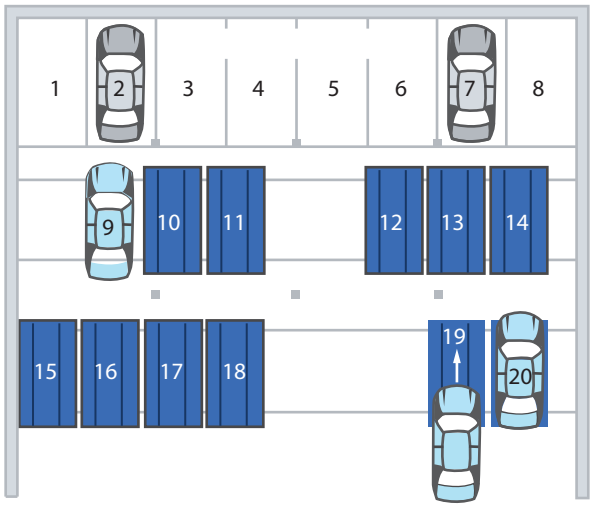
ELECTRICAL DATA

Control box
The control box must be accessible at all times from outside of the system! Dimensions approx. 1000 x 1000 x 300 mm. Cutting through of wall from control box to parking system (contact the local agency of LevantaPARK for clarification).



Foundation earth connector
All connection of the equipment must be in accordance with relevant Australian standards including the requirements of AS 3000 on electrical earthing.

All StorePARK systems can work in conjunction to Sliding Pallet system designs in the same quality aspects of the StorePARK semi automatic.



ACCESSORIES

■ STANDARD □ OPTIONAL

DESCRIPTION				NOTES
Nylon Package	■	■	■	
Screws anchors	■	■	■	
Manual door with electro mechanical lock, net panels	□	□	□	
Manual door with electro mechanical lock, perforated metal sheet	□	□	□	
Automatic door with electro mechanical lock, net panels	□	□	□	
Automatic door with electro mechanical lock, perforated metal sheet	□	□	□	
Height 2.1 mt. between platforms	□	□	□	
Platform width 2.4 mt / 2.4	□	□	□	
Nr. 2 Photocells barriers H=600 mm. for forward and backward control	□	□	□	
N°1 Photocell barrier for car - roof control interference	□	□	□	
Display touch screen support	□	□	□	
Non standard power supply	□	□	□	On request
2 colors traffic light (Red / Green)	□	□	□	
2 colors traffic light (Red / Green) design style	□	□	□	
LED lights for platform lighting	□	□	□	
Flashing light	□	□	□	
Siren	□	□	□	
Remote control each receiver			□	
Remote control each transmitter structure	□	□	□	
Hot dip galvanized structure H=1.8 mt	□	□	□	
Hot dip galvanized structure H=2.1 mt	□	□	□	

Designed for Australian site conditions

Enginered & Manufactured in Europe

QLD - 17 Canberra Street	Hemmant	QLD	4174
NSW - 89 Gascoigner Street	Kingswood	NSW	2747
WA - 67 Tacoma Circuit	Canning Vale	WA	6155
VIC - 135 Northcorp Boulevard	Broadmeadows	VIC	3043
SA - 6 Sheffield Street	Woodville North	SA	5012

COMPLIANCE DATA

SEMI-AUTOMATIC STORE PARK SYSTEMS CONFORM TO

- AS 3000
- AS Part 1601
- ISO 9001
- AS 60204
- AS1217.1
- EN14010

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LevantaPARK

Smart Solutions for Vehicle Parking and Car Storage