

## Parking Ramp Charging Infrastructure table

This table provides some options for ramp managers regarding charging infrastructure and payment systems. One ramp can potentially have many of these approaches available for different user groups.

	Description	More info	Payment collection	Communication connections	Installation costs	Ongoing costs	Reserved	Pros	Cons
1	Free Level 1 charging outlets	Conduit and wiring	Normal parking fee	No	Lowest	Electricity	No	Simple, client attraction and publicity	Extra electricity costs, users have to bring own cord.
2	Level 1 or 2 units with extra flat fee	Conduit, wiring and charging stations	Parking + Extra flat fee	Depending on the technology used	Higher	Electricity costs are recouped through fee.	No	Relatively simple system, minimal or no communication costs	Pricing is not based on usage.
3	Level 1 or 2 units in dedicated parking spots for monthly fee	Conduit, wiring and charging stations	Monthly fee	Depending on the technology used	Higher	Electricity costs are recouped through fee.	Yes	Relatively simple system, minimal or no communication costs. Pricing can be higher based on the guaranteed spot	Pricing is not based on usage. Potentially lowers parking space utilization
4	Level 2 station installed between two parking spots	One spot reserved for workplace charging and another for multi housing charging	Monthly fees	Depending on the technology used	Lower per parking spot.	Potentially communication costs	Yes	Potentially doubles the charging system utilization and increases revenue	Pricing is not based on usage. Potentially lowers the parking space utilization.
5	Third party system and billing	Conduit, wiring and advanced station	Service provider	Yes	Varies based on the service provider	Yes, often consisting of flat annual service fee + percentage of billing	Can be	Pricing can be based on usage. Simple for ramp owner, provides more data, enables multiple users	Expensive, ongoing costs reduce the profit

In case 4, customers have dedicated parking spots but they share the charging unit. One of the spots could be sold as a dedicated workplace charging spot with access to the station during the day on weekdays, and the other parking space customer would use the station during evenings, nights, and weekends (multi housing charging). This would double the charging station utilization rate and increase the revenue.