**Overground Puzzle – Electromechanical (OGP)**

The **Overground Puzzle Parking System (OGP)** is a fully automated electromechanical solution designed to maximize parking capacity in limited urban spaces. By using an intelligent combination of horizontal and vertical pallet movements, the system operates just like a puzzle—allowing cars to be parked and retrieved efficiently without the need for wide driveways or ramps. Vehicles on the **top level are lifted vertically**, those on the **middle level can be lifted or slid**, and the **bottom-level pallets slide horizontally**, ensuring seamless vehicle access and optimal land utilization.

This system is available in **two major variants based on lifting mechanisms**: the **chain type** and the **steel wire rope type**, both engineered for high durability, smooth operation, and low maintenance. Designed with advanced automation controls and sensors, the OGP ensures safe, reliable, and user-friendly operation with minimal manual intervention. Its modular design allows customization based on site dimensions, making it suitable for residential complexes, office buildings, commercial malls, and high-traffic urban parking zones. By combining efficiency, automation, and safety, the **Overground Puzzle Parking System** stands as one of the most effective solutions for modern cities facing parking space shortages.

**General Specifications**

* **System Length:** 6500 mm
* **System Width:** 2400 mm per grid
* **Pallet Width:** 2000 mm – 2400 mm
* **Car Weight Capacity:** Up to 2000 – 2500 kg per car
* **Car Height Capacity:**
  + Lower level: 1550 mm – 1750 mm
  + Middle level: 1600 mm – 1800 mm
  + Upper level: 1800 mm – 2000 mm
* **Operation:** Fully automated electromechanical with PLC control system
* **Drive Mechanism:** Chain type / Steel wire rope type (as per requirement)
* **Power Requirement:** 2.2 kW – 4.0 kW (depending on capacity & levels)
* **Structure:** Heavy-duty steel with powder-coated, anti-rust finish
* **Safety Features:**
  + Automatic locking system
  + Overload and obstruction sensors
  + Emergency stop system
  + Anti-fall safety mechanism
  + User-friendly control interface
* **Suitable For:** Sedans, hatchbacks, SUVs, luxury cars