The Ultra Stations

Stations may be located above grade, at grade, below grade, or even directly inside buildings (due to the virtually silent nature of the electric vehicles). The stations are located on offline sidings so that stopped vehicles do not interfere with the throughput of vehicles which wish to bypass the station. Due to their relatively low cost and small size (compared to e.g. rail stations), stations can be placed at a small spacing to reduce passengers’ walking time, which improves accessibility without loss of speed (as stations are offline).

Stations can be enclosed or open-air, always providing at least a minimal covering above the berth area, and are designed to be suitable for 24-hour operations if required. An Ultra station comprises a number of berths, at each of which a single vehicle docks, allowing passengers to embark or disembark. Berths are typically arranged in a staggered parallel configuration (known as a “sawtooth” arrangement) to enable vehicles to depart in any order. This prevents the blocking of the station by passengers slowly alighting or boarding a particular vehicle.

Figure 1: An example of a two-berth Ultra station, with berths arranged in parallel. In this arrangement, the vehicles can depart in any order.
Ultra PRT stations have been designed to be fully accessible to all, meeting access requirements for both the UK and the US. Disability groups have tested the system and commented very favourably on the attractions of the system, and Ultra PRT has been involved in discussion with the UK Government mobility groups including DPTAC (Disabled Persons Transport Advisory Committee) since the start of the design to maximize accessibility by all groups of users.

The passenger station shown below demonstrates the ability of the system to be readily installed on an existing structure. It also illustrates the multiple independent berths which facilitate passenger loading. Also shown are the passenger interaction screens at each berth which enable passengers to direct the vehicle to take them to the destination of their choice.

![Image of Ultra PRT station](image.png)

**Figure 2: Focal Station serving Terminal 5 at London Heathrow Airport**