



With the growing necessity for adequate parking in urban areas these days, it is no surprise that many inner city parking facilities have turned to automated solutions; allowing reduced labor cost, increased profits, and less downtime. Always searching for new and exciting means to implement the latest in industrial control technology, ICP DAS, has recently introduced the WinCON programmable automation controller, to yet another facet of industrial control consumers! By offering a versatile, Windows based automation control solution; ICP DAS has effectively made it easier for automated parking consumers to control, track, and analyze pertinent information via a simple user interface!

### Installation Hierarchy:

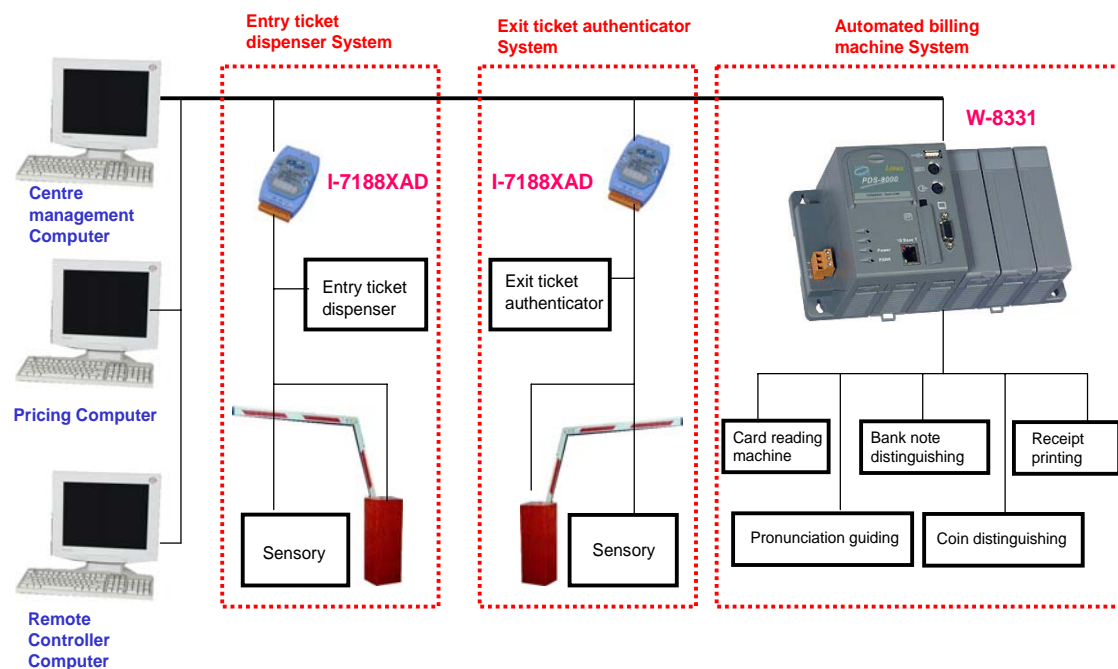
#### RS-485 Network

- Ticket Dispenser (Entry) : **I-7188XAD**
- Ticket Authenticator (Exit) : **I-7188XAD**
- Automated billing machine / Automated charge machine : **W-8331**

#### Ethernet / LAN Network

- WinCON W-8331
- Pricing computer
- Central management computer
- Automated gating machine

### Automated card park billing management system



## **The Advantages of migrating to ICP DAS' Programmable Automation Control Solution:**

- Real time data acquisition for hourly/daily/weekly profit analysis
- Windows based OS for easy and familiar point of interface
- Capable of functioning as a warm/redundant backup system, independent of other devices on the network
- Rugged industrial design allows implementation in harsh environments, including: moisture, extreme temperatures, noise, and vibration
- Multitude of diverse COM ports (Ethernet, RS-232/485, USB) for both local, and remote access
- Comprehensive solution for any application requiring automated control, combined with vast data acquisition capabilities.

### **How it works:**

- Upon entering the garage, the ICP DAS 7188 controller works in conjunction with an external entry ticket dispenser, to log each, individual entrant into a time/date stamped database. The 7188 will poll the total number of entrants for up to an hour, before sending the hourly "batch" of validated entrants to the central management computer's local area network, where the data packets are stored in a local database.
- Upon exiting, several automated functions take place; another 7188 controller works in conjunction with an exit ticket authenticator, which validates the customer's existing ticket against the correlating reference number it was initially assigned in the local database. Upon successfully referencing the ticket's ID number, the 7188 calculates the duration of time spent in the parking garage, and assigns a cost, based upon a preset aggregate hourly parking charge. After the amount has been calculated, the 7188 controller communicates the information to a local WinCON, which displays the cost on an LCD panel. Once the customer is aware of his or her total parking costs, the WinCON will work in conjunction with a bill collecting machine to finalize the transaction, and allow the customer to exit the garage.
- Once the transaction is complete, the WinCON relays the time/date stamped transaction information, back to the local database, where it is stored, until the end of the day, when the cash owed is compared against the cash collected.
- A key benefit gained from the migration to the WinCON PAC, was the capability to remotely access all three controllers and the LAN via a simple web enabled browser; thus allowing parking garage administrators to keep precise tabs on all vital information pertaining to the garage from either a home or mobile location.

In all, ICP DAS provided yet another powerful and cost effective solution to a new facet of industrial control consumers; allowing greater control, less downtime, and fewer mistakes, all through the implementation of programmable automation control!