Federal Signal Corporation

Port Controller Central Communications Processor



The Federal APD Port Controller is the communication interface and information buffer between on-line devices and your centralized processing system. The port controller is configured in three sizes: 8, 16, or 32 devices.

The Port Controller controls two-way communications between CG-90 Parking Gate, Auditor 2C Fee Computers, Passport® Plus Card Readers, Ramp Controllers, Passport Programmable Controllers, Bar Code Ticket Dispensers and the SCAN or MiniSCAN System.

Every Port Controller has its own crystal controlled master time clock, transaction buffer for messages, and battery back-up for memory and time clock.

SCAN PORT CONTROLLER

The SCAN Port Controller provides the communications interface between the SCAN computer system and up to 32 devices. It features anti-passback, master time for card readers, battery back-up of memory and time clock, and a transacttion buffer for 130 to 280 messages when SCAN is

FEATURES

- Two-way communications link between centralized processing systems and remote devices
- Message buffer
- Controls up to 32 on-line devices
- Real time monitoring
- Full and passive anti-passback features
- 15 day battery back-up
- 80 column printer / RS232 interface
- Auto resync
- Auto exit cycle
- Optional Prime Area Control

off-line. The SCAN Port Controller is designed to interface with Federal APD Passport Plus Card Readers, CG-90 Barrier Gates, Ramp Controllers, and Auditor 2C Fee Computers.

MINISCAN PORT CONTROLLER

The MiniSCAN Hand Held Computer may be plugged directly into the MiniSCAN Port Controller for communications to Federal APD Parking, Revenue, and Access control devices. Real-time activities and Auditor Fee Computer transactions may be printed on an 80 column printer. The Mini-SCAN Port Controller controls anti-passback functions(in either full or passive modes), and has the capacity to store 300 to 600 activity messages in the event the system printer is off-line.

PRINTER ONLY PORT CONTROLLER

The Printer Only Port Controller reports real-time transaction print outs and full anti-passback features when used on-line with the Passport Plus access control system. This type of Port Controller is ideally suited when a low cost anti-passback system (with a printer) is required.

TYPICAL INSTALLATIONS

Port Controllers provide the twoway link between centralized SCAN or MiniSCAN systems and remote Federal APD parking devices.



COMPONENTS

- Port Controller
- CG-90 Barrier Gates
- Auditor 2C Fee Computers
- Passport Plus Card Readers
- SCAN or MiniSCAN System

FEDERAL APD



The Federal APD Port Controller shall be the communication interface between the SCAN – Facility Management System, or the MiniSCAN System and on-line devices.

OPERATION

The Federal APD Port Controller shall be configured in one of three versions:

- 1. MiniSCAN Port Controller shall interface with Mini-SCAN Hand Held Computers and shall provide programmable anti-passback and auto resync capabilities. The MiniSCAN Port Controller shall have the capacity to store from 300 to 600 activity messages.
- SCAN Port Controller shall interface with the SCAN Facility Management System and shall provide programmable anti-passback and auto resync capabilities. SCAN Port Controllers shall have the capacity to store from 130 to 280 activity messages.
- 3. Printer Port Controller shall interface with Passport Plus Card Readers and shall provide hard and passive anti-passback through DIP switch settings. Printer Port Controller shall have the capacity to store from 300 to 600 activity messages.

The Port Controller shall provide anti-passback capabilities as follows:

- 1. Full anti-passback shall prevent card holders from using their ID cards out of sequence. The card holder will be unable to again access if the card is used out of sequence and a violation message will print out at the printer.
- 2. Passive anti-passback will allow a card holder to use their cards out of sequence but will print a violation message at the printer.

Port Controller shall provide an Auto Resync feature: After a specified time each day, this feature shall allow each card holder to use either an entrance or exit reader without being checked for anti-passback. Once the card holder uses the entrance or exit reader, the system will reset anti-passback for that ID. This is useful when a facility opens its gates at night or in the morning and allows card holders to exit or enter without using the card reader.

Port Controller shall provide an Auto Exit Cycle Resync feature: After a specified time each day, this feature shall require each card hold to use an entrance reader for their first card usage. This is useful when a facility closes down at night, opening its exit gates and allowing card holders to exit without using their cards. When card holders return in the morning they must use their cards to enter. If they do not, the system will treat them as if they are passing back their cards at the exit.

CONSTRUCTION

The housing shall be modular board design with piano mounted system status indicators. The housing shall be made of durable plastic: 2.6" H x 6.3" L x 6.1" W.

MECHANICAL

The Port Controller shall be configured in three (3) type: 8, 16 or 32 devices.

The Port Controller shall recognize the following Federal APD products as devices:

1. Auditor 2C Communicating Fee Computer.

2. CG-90 Lane Controller (including barrier gate)

- 3. Ramp Controllers.
- 4. Passport Plus Card Readers.
- 5. Passport Plus Programmable Controller.
- 6. Passport Plus Keypad Entry System.
- 7. Passport Plus Elevator Controller.

8. Bar Code Ticket Tracking Ticket Dispenser.

The Port Controller shall have a crystal controlled master time clock, a transaction buffer for messages and battery back-up for memory and time clock.

ELECTRICAL

The Federal APD Port Controller shall have a 232 interface, a 485 interface, a 422 interface and two relay outputs.

- 1. The RS-232 interface shall require a 25 pin female DB connector. On the SCAN Port Controller the RS-232 interface will act as a SCAN interface to the Port Controller. On the MiniSCAN and Printer Port Controller the RS-232 will act as an 80 column printer interface. Baud rates shall be selectable: 2400, 4800 and 9600 baud.
- 2. The RS-485 interface shall require a 6 pin modular jack. On the Printer Port Controller and SCAN Port Controller the RS-485 interface shall have no function other than to power the HHC. On the MiniSCAN Port Controller the RS-485 shall be the HHC interface for power and communications. Baud Rate shall be 4800 baud.
- 3. The 422 interface shall have a 5 pin pluggable terminal block. On SCAN, MiniSCAN and Printer Port Controllers, the RS-422 interface shall be the device communications interface. Baud Rate shall be selectable: 2400, 4800 and 9600 baud.

The power supply shall be 10-12 VAC wall transformer at 1 A or 10-13.5 VDC for Mini UPS power plug. The current maximum with the HHC shall be 700 mA.

COMMUNICATION CABLE

The communications cable shall consist of a four-color, two twisted pair, 22 gauge wire and 18 gauge common.



FEDERAL APD

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