emerald BDRM
Boarding and Deplaning Route Management

Features that make a difference:

- Sophisticated Airport Boarding and Deplaning Route Management (BDRM) via emerald Intelligent Access Terminal
- Control gate doors, air bridges, escalators and virtually any third party equipment in a single action
- Control which doors can be opened and which are closed or interlocked
- Intuitive WEB based tool for programming emerald display and associated cause and effect
- Provides airport specific gate logic configuration
- Access to programmed operational modes protected by emerald integral smartcard reader
- Unlimited modes of operation can be implemented
- Configurable timer available based on the number of boarding or departing passengers
- Provides effective passenger routing and segregation in an Airport environment
- A second card swipe enables the mode to be cancelled or extended at any time

The emerald Boarding and Deplaning Route Management (BDRM) solution provides a sophisticated touch screen based passenger routing system for airports. It quickly allows airport staff to put a particular gate into a specific mode of operation which effectively allows for gates to be multipurpose.

The solution combines an emerald Intelligent Access Terminal with a network of Ethernet I/O controllers. Based on an operator’s selection, a series of actions can be achieved via a single selection. This allows airport staff to easily configure the mode of operation required at a specific departure or arrival gate.

The emerald touch screen display can be customised via an intuitive WEB based tool to provide different modes of operation via its graphical user interface (GUI). The GUI displays a list of pre-programmed modes such as, “Domestic Arrivals”, “International Arrivals” or any other naming convention chosen by the end-user.

Once a relevant option is selected, the pre-programmed relays on the Ethernet I/O controllers can activate to:
- Interlock a series of doors to form a route
- Enable relevant signage
- Enable air bridges, fixed ground power units and much more

Configurable BDRM Timer

The emerald BDRM solution has been designed to be as configurable and user friendly as possible. Once an authorized cardholder has badged on the emerald reader, it is possible to define how long a mode of operation will activate for using an intuitive graphical scroll wheel. At any time the operator can extend or decrease the timer, and has the option to cancel the mode in its entirety.

Ease of Configuration

The WEB based tool allows for the programming of associated modes that will be available to the user on the emerald GUI. It also allows for re-programming of Ethernet I/O controllers logic, meaning if operational requirements change, it’s a simple process to reconfigure the system. The WEB programming tool also ensures there are no costly custom PLC programming charges incurred to make simple modifications to the BDRM logic.

Communications

The emerald readers talk to the Ethernet I/O controllers via Modbus over TCP/IP. This enables the Ethernet I/O controllers to be placed anywhere on the AC2000 Local area network. This can greatly save on cabling requirements as the emerald does not need to be in proximity to the Ethernet I/O controllers. Each I/O controller includes a 2-port Ethernet switch so a daisy chain network can be created without the need for additional Ethernet switches.
Emerald BDRM Topology

**TCP/IP Backbone Network**

- Emerald Intelligent Access Terminal
- Ethernet I/O Controller
- Ethernet I/O Controller
- Ethernet I/O Controller
- Hardwired Connections to CEM Field Devices
- Hardwired Connections to CEM Field Devices
- TCPIP@100m (330 ft)

**Requirements**

- AC2000 v7.1 and higher
- AC2000 Airport v7.1 and higher
- Emerald Intelligent Access Terminal
- AC2000 WEB PLC Programming Tool License
- Ethernet I/O controller

**Ordering Information**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWTSR-BDRM</td>
<td>AC2000 Boarding and Deplaning Route Management Web Configuration Licence</td>
</tr>
<tr>
<td>IOC/101/214</td>
<td>BDRM I/O Controller</td>
</tr>
</tbody>
</table>

To order contact cem.sales@tycoint.com or call +44(0) 2890 456 767

**Related Products**

- AC2000
- AC2000 Airport
- AC2000 Lite