

Specification Sheet for ES831

1.1 Barrier Arm Optical Turnstile (OT)

- A. Barrier Arm Optical Turnstiles shall utilize the building access control system to grant or deny access to the facility, and operate with a variety of reader technologies: i.e. proximity, Weigand, magnetic stripe, bar code, or biometrics as indicated on the Security Device Drawings.
- B. The pedestrian passageway shall be truly bi-directional at all times and the system will allow each passageway to be accessible in both directions at any given time.
- C. The product shall be nonrestrictive to handicapped persons, and provide equal access in accordance with The Americans With Disabilities Act of 1990/ADA, and NFPA Life Safety 101.
- D. Visual and audible annunciation shall be incorporated into each passageway to provide status of lane, indication of valid card read, alarm condition (with two (2) distinctive audible tones) using vertical (VGA) and horizontal (HGA) graphic arrays.
- E. The Barrier Arm OT shall insure that one valid card read allows only one valid entry by using IR sensors to determine the direction of travel and number of pedestrians passing through the passageway at one time. In the event of unauthorized entry or tailgating, the unit will latch into an alarm condition.
- F. All components and electronic sub-assemblies, including the MPU Controller, shall be designed specifically for the Barrier Arm OT, be solid-state in design, and be mounted within the bollards.
- G. Pedestrian throughput shall be 20-25 persons per minute, dependent on the card reader technology and the response time of the access control system.
- H. Unit shall furnish the following N/O control inputs: *Entry Card (Valid Access), Exit Card (Valid Access), Lane Bypass, Invalid Card, Emergency, Arm Disable, Free-exit Enable, Entry Closed and Exit Closed.*
- I. Unit shall furnish the following N/O status outputs: *Alarm Status, Valid Passage, Timeout (after valid card read), Bypass Status and Invalid Card.*
- J. Barrier Arm OT shall be Electro-Mechanical/Fail-safe in design.
- K. Product shall have "Push-to-Emergency-Egress" design built into the barrier arm with force required to push arm away consistent with ADA Specifications.
- L. The bollards shall use millwork construction (3/4" MDF) with all of the vertical panels secured through the use of extruded aluminum channels. These channels shall provide structural strength as well as form protective bumpers at the vertical exterior edges. The top surface of the Bollard shall be constructed from an artificial marble substrate and the side material shall be covered with a plastic laminate.
- M. All components and sub-assemblies shall be manufactured in the U.S.A.
- N. Manufacturer shall be Designed Security, Inc. Model ES831 Barrier Arm Optical Turnstile.