Aeroturn Designs, Manufactures, Delivers and Installs the world’s only Zero-Maintenance Custom and Standard Barrier Turnstiles.

We engineer quality into our Turnstile Programs for 20 year Solutions.

At the core of Aeroturn is a Product Development Company, headed by Licensed Professional Engineers. We have developed hundreds of residential, commercial and industrial products.

August 2011
U.S. NRC - HQ / OWFN
Rockville, MD
5 ADA Glass Portal Lanes; Employee & Visitor Entrances
From Federal N.T.P. to Operational: 8 weeks & 2 days
Main Entrance - New Lobby Addition
Custom Matched Avonite Tops to new security desk.
Stainless match to architectural highlights inside lobby.

Integrator: Digitronics, Inc., Fairfax, VA
Mala Grover; 703-698-9800

End User: NRC, Rockville, MD
Darlene Fenton; 202-557-6559

Digitronics is currently handling all security integration at the 2 existing HQ buildings.
**Glass Portal Turnstile Baseline Performance Specification**

**Model:** Glass Portal  
**P/N:** XX-PORT-SS  
**Cabinet:** 60”-96”l x 11.5”w x 39”-40”h  
**Finish:** #4 Brushed Stainless (options available)

Note: Can also be considered an "Optical Turnstile" in some specifications.

1. The Glass Portal Turnstile shall be integrated with a building Access Control System to grant or deny access to the facility.
2. The Glass Portal Turnstile shall be capable of utilizing Proximity, Bar Code, Magnetic Stripe & Biometric readers. All readers are factory mounted and protected by quartz coated polycarbonate when possible. Due to the nature of certain types of readers, Aeroturn fabricates reader mounts and guides that will enhance and prolong the service life of said devices.
3. The pedestrian passageway (typ. 36” clear) is bi-directional at all times. The moving Glass Security Panels must be 10mm tempered safety glass with polished safety edges. **No plastic substitutes.** The Glass Panels must open and close without advancing the leading edge toward a pedestrian in the entrance or exit direction. Glass Panels can never swing towards a pedestrian in bi-directional passages.
4. The passageway must be directionally controlled as to not allow passage in opposite direction of a positive card read. This feature prevents tailgating and invalid access into the facility.
5. Glass Portal Turnstiles shall be non-restrictive to handicap personnel. All lanes must be capable of providing a 36” clear passageway without increasing the size of the Turnstile cabinet, i.e. The end cabinet and center cabinet must be the same physical dimension and still contain a single or double mechanism. Vertical readers must be available for wheel chair accessibility on all cabinets.
6. The Glass Panel must be capable of being replaced without disassembly of any portion of the turnstile cabinet. The Glass Panel hinge shall be single piece extruded construction. All replacement of Glass Panels must take place in the passageway without rear or side access to turnstile cabinet.
7. Additional visual and audible outputs available.
8. The Glass Portal Turnstile must provide optical resetting of the lane. Custom PLC options available.
9. Operation shall be capable of allowing 1 single passage per valid card read. Passageway shall be directionally sensitive and optically resettable. If pedestrian attempts to travel in opposite direction of valid card read; Glass Panel will close and not allow invalid access to the passageway.
10. ALL components and assemblies are designed specifically for the Glass Portal Turnstile. Power Supplies, On-Board UPS, Circuit Breakers shall be DIN Rail rigidly mounted inside the Turnstile Cabinet. Control Board, Interface Board and programmable CNT Relay shall be mounted on an equipment plate inside the Turnstile Cabinet.
11. Pedestrian throughput must be capable of 30 passages per minute, dependent on the access control technology.
12. Entrance/Exit control is performed by a dry contact closure of no more than 200ms. Fire Open control is performed by breaking the normally closed wire pair/circuit provided at the Turnstile Control Board. Push Button/Panel and exit control shall be available.
13. **Glass Portal Turnstile must operate with a 24VDC micro-controlled brushless motor capable of demonstrated 10 million continuous cycles without any type of scheduled or unscheduled maintenance.** Site adjustable independent panel speed must be available. A continuous duty (capable of 14 million rotations) safety slip clutch must be coupled with motor to provide safety to the pedestrian in case of authorized or unauthorized contact with the Glass Panels. Safety Clutch must provide the same function in both directions without damaging the Turnstile Mechanism.
14. The Glass Portal Turnstile must be capable of providing a single ADA 36” clear passageway lane with an outside dimension of the cabinet footprint of 5’-0” maximum. The Glass Portal Turnstile must be capable of providing a single ADA 36” clear passageway lane and be mounted to the floor on a 48” centerline.
15. Glass Portal Turnstile Mechanism must be capable of being offset in the original Turnstile Cabinet towards one end from centerline. This feature must be available if normally unlocked operation is possible. Keeping the Glass at the far end of the entrance or exit passageway enables Glass Doors to close passageway upon invalid card read without coming in contact with pedestrian.
16. Glass Panels must have the option of clear or tinted. Glass Panels must be capable of being 8’-0” tall as a standard feature without compromising the 10 million cycle zero-maintenance capability.
17. Glass Portal Turnstile shall have an available manual key emergency open override at the Turnstile Cabinet.
18. Glass Portal Turnstile shall have a passageway odometer internally or remotely mounted.
19. Glass Portal Turnstile Cabinet shall have replaceable components without mandatory replacement of entire cabinet due to damage.
20. **The Glass Portal Turnstile must have a 5 year non pro-rated Zero-Maintenance Warranty.**
21. All engineering, fabrication, assembly, testing, burn-in and crating shall take place in the U.S.A., end of portal spec.