

## **Full Height Single Turnstile**

**TPW-221AF**

**Product Manual V3.2**

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## Product Description

TPW-221AF is fully-automatic with single passageway, turning at 120°. The housing made of high quality stainless steel is durable; the mechanism modules are using the international top brand DC brushless motors and precise positioning encoders, so as to ensure that turnstile arms can rotate quickly and accurately, stably and quietly, with low-power consumption, energy conservation and environment protection.

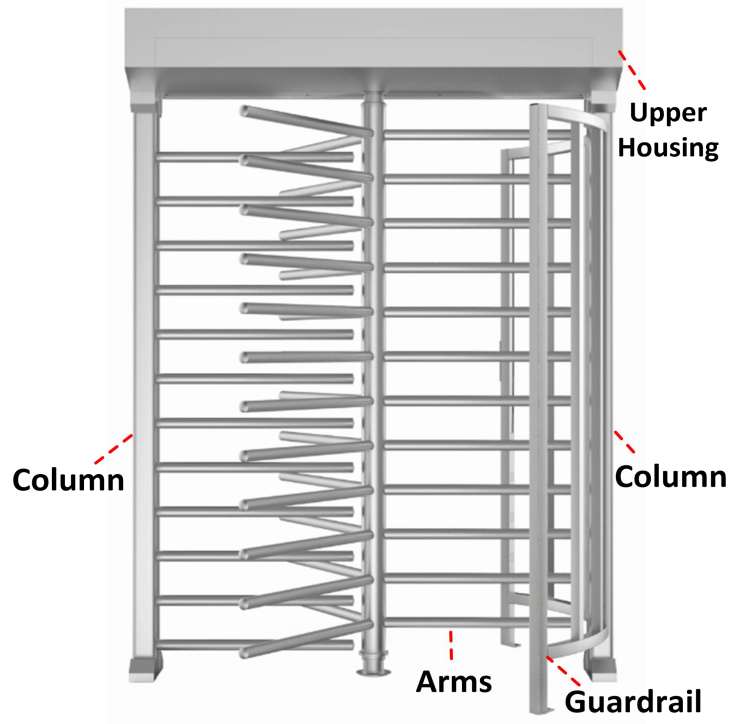
## Feature

- ✧ Convenient for transit.
- ✧ When a valid opening signal is given, the arms rotate at a certain angle towards the opening direction, reminding pedestrians to pass through.
- ✧ Effectively achieve single-user throughput for each time. Its safety and reliability are much higher.
- ✧ Suitable for places with smaller flow of people but higher security requirements.
- ✧ The capabilities of water & dust resistance are strong. With powerful adaptability to environment, it's applicable for various outdoor and indoor occasions.
- ✧ Equipped with the dry contact signal input interface, RS485/RS232 interface, TCP/IP interface (optional), compatible with all kinds of access controllers.

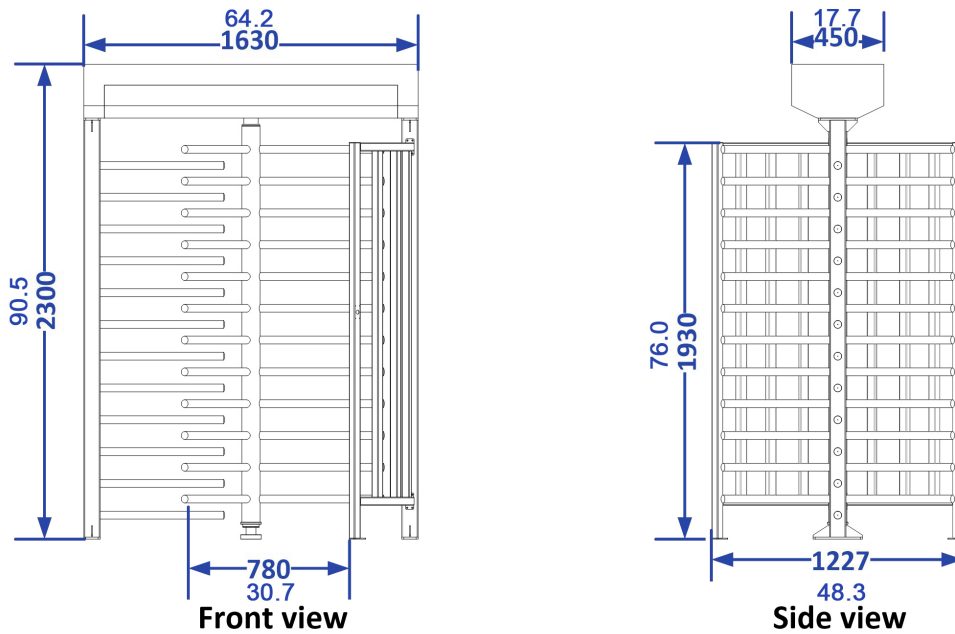
## Occasion Applications

Suitable for military bases, prisons, factories, residences and other high security occasions.

## Structure Chart



## Dimension Figure (Unit: in, mm)



## Product Parameters

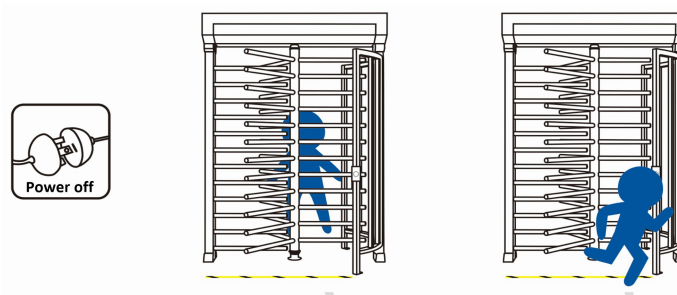
Structure Parameters	
Housing material	304 grade stainless steel
Surface treatment	Brushed finish
Arms material	304 grade stainless steel
Technical Parameters	
Normal throughput capacity	20 ~ 35 people / min (according to the condition of pedestrians)
Evacuation throughput capacity	60 people/min (according to the condition of pedestrians)
Operation temperature	-20°C~60°C
Electric Parameters	
Power supply	AC100-240V , 50/60Hz
Rated power	50W
Input/ Output signal	6-channel relay signal output / 8-channel dry contact signal input
Communication interface	RS485 / RS232; TCP/IP interface (customizable)
Driving motor	DC brushless motor
Positioning method	Use the encoder to position the gate accurately
Method of motor control	Use high-performance DSP chip

## Product Function

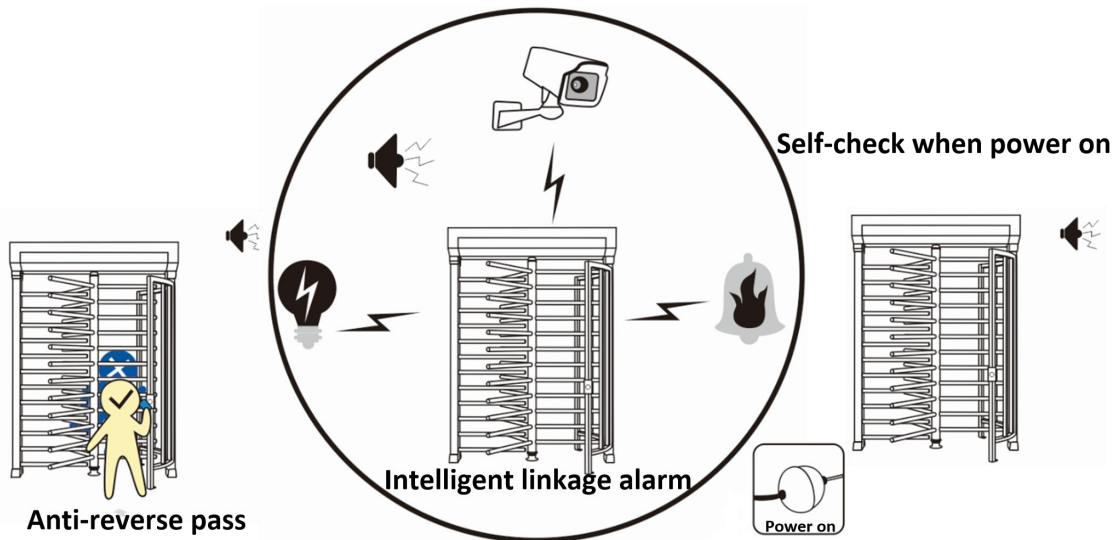
### ● Basic Function

- **Passing mode switching function**: The entry and exit can be set independently **【controlled mode】** / **【 free mode 】** / **【 forbidden mode】**
- **Automatic reset function**: The turnstile will open arms after receiving valid opening signal when standby. The arms will return to the hindered zero position automatically in the following cases:
  - (1) Within the allowed time, pedestrians have been detected to pass through the passageway in specified direction.
  - (2) Over the allowed time, there is no people passing through the passageway.
- **Self-recovery function**: The arms do not return to the hindered zero position because of human intervention. After revoking human intervention, the arms will return to the hindered zero position automatically.

- **Memory function of passing requests:** When more than 2 passing signals are given at the same time (including the same direction and opposite direction), the system will remember all the passing requests and finish them one by one. The number can be up to 255.
- **Anti-intrusion function:** Not giving a valid opening signal in the controlled mode or in the forbidden passing mode, and the arms are forcibly pushed, which will be regarded as illegal intrusion. In this case, the arms are in a state of lock to prevent pedestrians from trespassing.
- **Anti-reverse pass function:** One direction receives a valid opening signal, but pedestrians enter the channel from the opposite direction and push the arms within the allowing time. It will be deemed to be the reverse. The arms of the directions lock in order to prevent reversion.
- **Anti-clamping function:** When turnstiles meet obstacles in the homing process, the arms will stop running in a specified time. It effectively protects pedestrians from bruising. The arms will be put themselves in place over the default time.
- **Compatibility:** Equipped with the dry contact signal input interface, RS485/RS232 interface, TCP/IP interface (optional), compatible with all kinds of access controllers.
- **Security Design**
  - **Self-check function when power on:** The system will self-check routinely when power on, and intelligently detect the key hardware and function. Find the hidden danger within the shortest time!
  - **Open gate when power off:** The system will open arms automatically when power is off or manually push the arms to be open so as to evacuate people during emergency.



- **Emergency escape function** : Equipped with emergency escape control device, the system can open automatically, and pedestrians can bi-directional get access by manually pushing rod in order to facilitate evacuation .
- **Intelligent linkage alarm** : Illegal traffic events can be linked with other alarm monitoring equipment: such as access control systems, video management systems.



## Product Customization

### ● Customized Functions

- Built-in or external counter
- TCP / IP communication
- No passage when the power is failure.

### ● Gate open button

- External gate open button.
- Install the gate open button with wireless remote control.

### ● Cold Weather Package

- Constant temperature system can be installed inside the equipment in low temperature environments.

### ● Materials

- The material of housing can be 316 grade stainless steel, and the thickness of stainless steel can be customized.

### ● System Integration

- Integrate with access control system and built-in reader appointed by customers.
- Integrate with visitor access control system.
- Integrate with ticketing system.

### ★ Notes:

- (1) The product design and specifications are subject to change without prior notice.
- (2) Please contact us directly for special features customization.