**T1 AéroWing Gate Specification**

**Manufacturer - Matrix Research Limited**

**Product Brand - ACX**

**Design, Throughput, Dependability**

Design

1. This AéroWing Gate (the Gate) is in T-shaped, with the two glasses on the sides in trapezoid
2. The Gate’s material (SUS#316 or others), appearance (colour spray or electroplating) length, surface (wiredrawing/glossy/matte), obstacle (length, height, printed pattern), card area, installation (flooring panels) are customizable
3. Standard unit size: 1800mm (L) x 180mm (W) x 1000mm (H). The overall thickness of the turnstile’s top cover is 55mm, with the max. thickness of 100mm in the center of the top cover
4. Standard dimensions: 720mm door wing height, 600mm / 900mm passage width (two obstacle wings made of 8mm tempered glass)

Throughput

1. The Gate is set with 9 kinds of dual-direction control modes (alternative), while providing real-time status monitoring with its 8 pairs of OMRON sensors (standard)
2. Capacity (per minute per direction): more than 25 people in the normally closed position (open position as an alternative)
3. Operating speed time is 0.8-1.6s (customizable)
4. Door opening: 90° to the middle; movement angle: 166°

Dependability

1. Lifespan: 15M times; Mean Cycles Between Failures (MCBF): 10M times

**Safety**

1. The Gate is equipped with a 2D Laser Module (99% detection accuracy, higher compared with IR). This Laser Module is a ground-level safety sensor ensuring child-friendly passage
2. Laser safety class: Class 1 (IEC 60825-1:2014), which means it is safe for human eyes
3. The Low Noise Operation guarantees an average sound level of under 60db, which will not cause hearing damage
4. The Gate has a standard external electrical interface, with photoelectric safety isolation.
5. Advanced protection to prevent electrical leakage, pinching, and collision is also put in the Gate
6. Lock disengages in case of a power outage (fail-safe operation)

**Technology (Access Control)**

1. The Gate can be integrated with the Lift Destination Control System and Building Visitor Management System
2. The Gate supports a temperature check and a multi-technology reader. Users can set the reader to handle different access conditions, including human biometric technologies (Facial Recognition and Palm Vein Recognition), Mobile Scramble/Fixed QR Code, Contactless Smart Card 13.56MHz, Octopus, Bluetooth, and NFC.
3. All the access devices shall be installed under the glass top cover of the turnstile, excluding the temperature sensor detector
4. If the body temperature device is to be installed on top of the turnstile’s top cover, the max. dimensions cannot exceed 120mm (L) x 80mm (W) x 75mm (H)
5. If the facial camera is to be installed on top of the turnstile’s top cover, the max. dimensions cannot exceed 100mm (L) x 70mm (W) x 36mm (H)
6. The facial recognition algorithm shall be Face++ / SenseTime
7. The Palm Vein recognition technology shall be Fujitsu PalmSecure-F Pro technology
8. The Gate’s scanning ranges from 60cm to 180cm. It also accommodates wheelchair users and people with luggage or trolleys.
9. The devices are installed on the gate's top surface area, with LED lights to indicate access status and passage direction.
10. It has an enhanced anti-tailgating (also known as anti-passback) design, preventing multiple people passing the Gate at the same time
11. The Gate is installed with a 5.5” LCD to display the system message, the access granted and access denied message, and the destinated lift number (if the Gate is integrated with the Lift Destination Control System)

**Electrical & Environmental**

1. Power supply: AC220V ±10% 50Hz; AC110V ±10% 60Hz (Optional)
2. Frequency: single phase 50Hz to 60Hz
3. Operating voltage: DC24V
4. Current: static 300mA; dynamic 3A (maximum operating current)
5. Operating temperature: 0°C / 32°F to 60°C / 140°F
6. Storage temperature: -20°C / -4°F to 60°C / 140°F
7. Relative humidity: 5% to 95% (non-condensing)