

TK Access Control

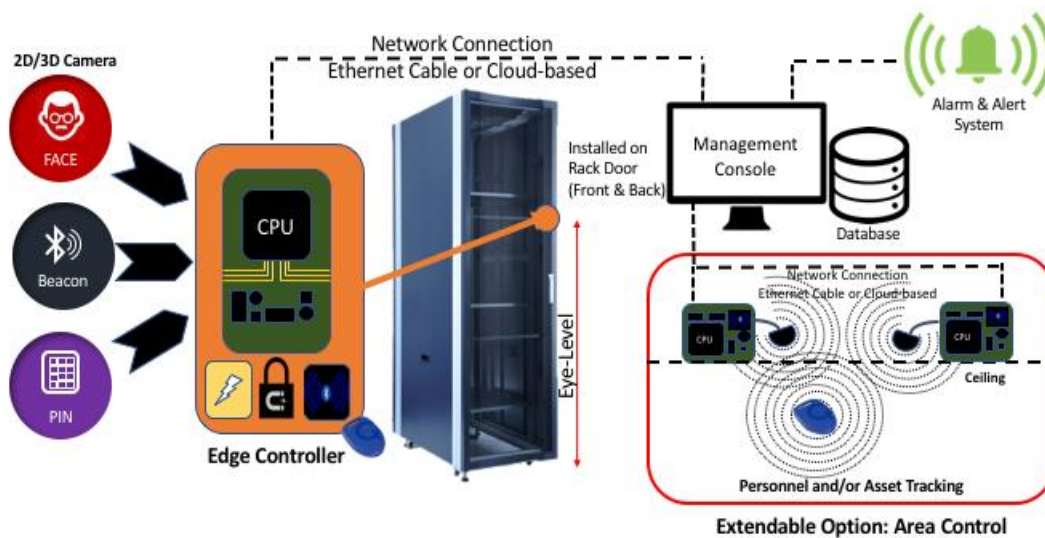
DC Last Mile Physical Security for Data Protection: Complying to ISO/IEC 27001

Considered to be innovative and industry-disruptive, TK uses credentials of a carry-about physical device, a piece of possessed knowledge, and a feature of a person's physical being, to grant an authorized individual access to a given physical facility, secured enclosure, or computer-based information system.

The solution can also be expanded to perform personnel and asset tracking within the confines of a controlled area. This creates a constant awareness of movements and potential threats, so that faster security action can be taken.

Physical Security for Last Mile Data/Information Protection

Complying to ISO/IEC 270001 Control A9 and A11



Access Control Credentials

Physical Device: Use of Encrypted Proximity Beacon

Area Control: TK uses encrypted proximity beacon to detect the presence of the device carrier. The beacon itself is a Bluetooth Low Energy device (BLE). When an authorized individual is within a programmable range, it will then activate one of the authentication requirements for the system.

Environmental Sensor: The proximity beacon can act as an IoT sensor for environment (temperature, humidity, and etc.), forwarding the findings to its own monitoring solution.

Person's Physical Being: Use of Facial Detection/Recognition

TK uses 2D- and 3D-camera to perform facial detection/recognition as one of its other authentication requirements.

Knowledge: Use of PIN-Code Access Control

TK uses Personal Identification Number (PIN)-Code access control as its last of its authentication requirements.

TK Access Control Offerings

Form of Multi-Factor Authentication		2FA	2.5FA	3FA
Authentication Credentials	Encrypted BLE Proximity Beacon (Bluetooth)	Primary	Primary	Primary
	2D Facial Detection/Recognition	NA	Tertiary	Secondary
	3D Facial Detection/Recognition		NA	
	PIN-Code Access	Secondary	Secondary	Tertiary
Security Strength	Scale of 1 to 10 1 being weakest and 10 being strongest Baseline RFID + PIN-Code rated at 6	7	8	10
ISO/IEC 27001:2013 Compliance	Access Control (ISO 27001:2013 A9)	Y	Y	Y
	Physical and Environment Security (ISO 27001:2013 A11)	Y	Y	Y

Note: With BLE Proximity Beacon it is possible to perform Access Control, Personnel Tracking and Asset Tracking

- 2D Facial Detection/Recognition uses a 2D camera on-board on the edge controller.
- 3D Live Face Detection employs a 3D camera connected to a separate system due to the higher data processing requirement today (depth sensing). However, within the product roadmap, there are plans to eventually roll out a new edge controller with a powerful processor on-board that can address these technical limitations. The chip manufacturer has not yet committed to a release date of such a processor at the time of release of this document on 1st September 2017.

Access-Control-As-A-Service (ACaaS)

TK also offers a cloud-based management solution. For more information kindly contact us.

Minimum System Requirement

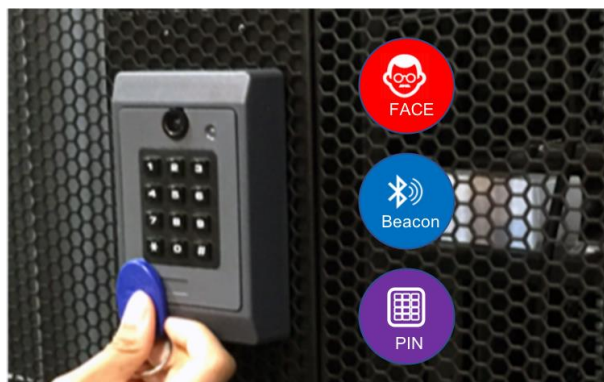
A Class IP20 EM Lock (Fail-Lock) is included with each door unit.

Door Unit:

Network Ethernet RJ-45 Communication with Assigned Static IP Address
Power 12V DC, 10A (Can be acquired from ERS)

Management Software (for up to 1000 door unit management)

Hardware Intel i5-3230M Dual Core with 16GB RAM
OS Microsoft 64-bit Windows 10
Storage SSD Storage 512GB



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