Checkmate IoT

QR CODE BASED CLOUD ENABLED ACCESS CONTROL SYSTEM

Introduction

Physical Access Control/Attendance System in todays context means opening an Electric/Electronic Lock to provide access to an armed location. The traditional configuration of such systems are done using manufacturer Client Software. Access is given based on RF Card or Biometric based on Gate & Time Zone. Such system are having its limitation of granting permanent access, until it is recalled.

Cloud Enabled Access Control

FORTUNA offers an WiFi enabled hardware which is configured to communicate with an online/Cloud Server. The Access to an armed location may dynamically be given based on logic & condition defined in the Application back-end database, which is otherwise difficult to manage in a traditional system. Users QR Code may be verified online for accessing the gate. It enables you to provide or revoke user Access, in realtime.

Checkmate IoT
(IoT technology driven Access Controller)

MicroQR
(QR Code Reader)

B2002
(Face Reader)*

*Employee Photo may be used as credential to enter access door.

Brief description about the operation :

- The user shows his QR Code on a QR Reader attached to Panel for requesting Attendance/access to the controlled Door.
- The Code, as being read & is verified from a dynamic user database in online mode using IoT Protocol.
- The management software verifies the QR Code for the validity of the user attendance/access to this location, at this point-in-time, based on one or more of following:
  - ❖ Validity date for subscription based Access/Attendance
  - ❖ Condition based like forbidden for a period(like repair/maintenance/suspended)
  - ❖ Occupancy based(like limiting user count in an area/for a project)
  - ❖ Granting access based on demand(Security, Visitor or New User Access)
  - ❖ Time of day(like night) or day of week(like Weekly off) Validation
- The door may be opened dynamically upon verification of in online mode, based on conditional Access.

Advantage of an IoT Access Control System :

- No need to provide credential like RF Card or biometric
- No need to define the Access to a credential which is (sort of) permanent
- Scaling up is effortless, as the Application talks to database for granting access
- Online view of Attendance, Access to an area or Door status

Fortuna offers smart door access system with unlimited flexibility, with latest IoT based technology harnessing the power of Internet, to bring online preciseness for Attendance/Access Control. It can be scaled up to a large online system without any latency delays. A Centralized management software is hosted in the Cloud Server for configuration, Dash Board or local Administration.

Interface supported :

- ❖ QR Code Reader Interface(RS232C): 2 Port
- ❖ Weigand Reader Interface : 2 Ports
- ❖ Door Open Output Relay : 2 Nos
- ❖ Request-to-Exit Input : 2 Nos
- ❖ Door Open Sensor Input : 2 Nos
- ❖ Access Denied Indication : 2 Nos
- ❖ Emergency Door Open Input : 1 No
- ❖ Auxiliary Input : 2 Nos
- ❖ Auxiliary Output : 2 Nos

Cabling

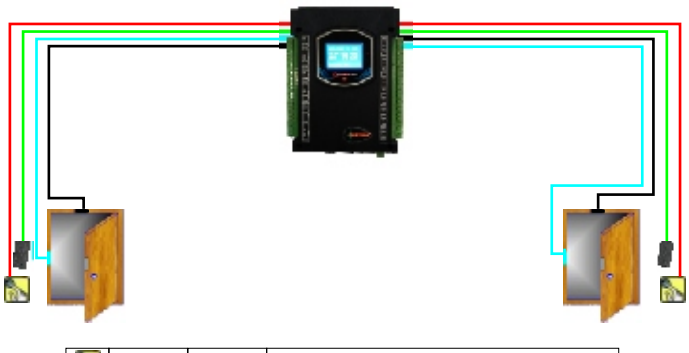
6 core multi strand (each core 14/36) shielded cable for Reader is used. One Pair each of electrical multi strand cable (each core 1.5 sq mm) is used for Lock operation, Door Open Sensor and Exit Switch. These cables run from each Door to Controller. Cable length should be within 100 m.

IoT Xs : Web based Access Management Application Software

Checkmate IoT requires a Cloud Based Application Software to set-up the User & Access Door configuration. It is simple to configure the complex Access Door set-up, like multiple offices across various location with Multiple floors with multi-Doors. Features like Anti-pass back, Escort/Master Card, Common & Emergency Door set-up may be done effortlessly. The Occupancy details & Door Status in Access controlled room, is visible on dashboard. The Validity (like in Club/ Gym) may be defined to capture access. It captures the transaction data online and generates movement reports etc..

Its Visitor management deals with Front Office Management intelligently with QR Code authentication. Upon Visitor registration, a Pass is generated with QR Code to provide Access.

TYPICAL INSTALLATION LINE DIAGRAM



	ReX		2 Core, 0.5 Sq.mm cable (for ReX)
	Reader		6 Core(Each 14/36),Shielded Cable (for Reader)
	Lock		2 Core, 0.5 Sq.mm cable (for Lock)
	Door Sensor		2 Core, 0.5 Sq.mm cable (for Door Sensor)

VISITOR MANAGEMENT

TECHNICAL INFORMATION

- ❖ Users : 2000 Users(upgradable to 5000)
- ❖ Power: 12 V, 2 Amp
- ❖ Network WiFi(802.11 (b/g/n)

USE CASE

1. Offices
2. Gym
3. Club
4. Shared Work space
5. Lounges / Conference Room
6. Process Rooms in Pharmaceutical Industry

ORDERING INFORMATION

Checkmate IoT : Access Controller with 4 Reader I/F
UPS with Battery : UPS with battery for 4 hours back-up
MicroQR : QR code reader with RS232/Weigand I/F
B2002 : Face Reader with LAN port & 5.5" display
MicroDUAL : RF/Mifare Reader with 3" Read Range
IoT XS : Configuration, Data Capture & Reporting S/W
ID Card : (a) Proximity Card (b) MIFARE Card (1K/4K)
Door Lock : (a)Strike (b)EM Lock (c)Turnstile (d)Boom
Cable : (a)Reader Cable (b)Lock Cable
Accessories : (a) Exit Switch (b) Door Sensor

FORTUNA

FORTUNA IMPEX PVT LTD
P-73, Kasba Industrial Estate, Phase-2, Off E. M. Bypass, Kolkata - 700 107 (India)
☎: 7550 670 670 : info@fortunaindia.com : www.fortunaindia.com