



DOOR INTERLOCKING & ACCESS CONTROL SYSTEMS



BUZZER



BMS/EMS



AHU

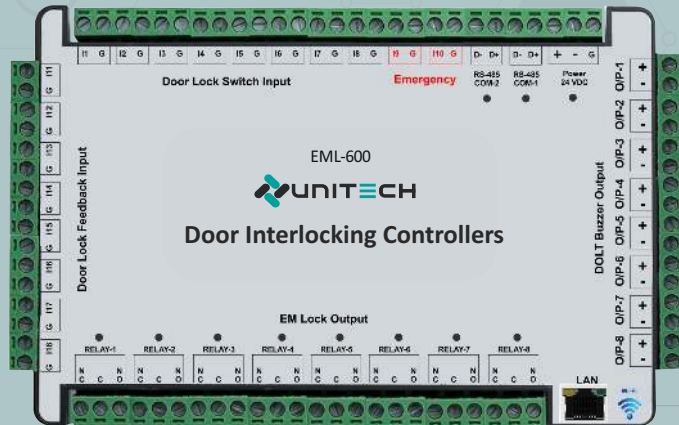


MONITORING SOFTWARE



FIRE ALARM

- Com.- RS485 MODBUS / Ethernet ✦
- Inbuilt Web Server for Configure ✦
- Visual & Audio Indications ✦
- Easy Third Party Interface ✦
- Stores 50K Event Buffers ✦



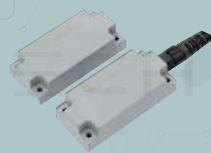
- ✦ Enhanced Security Features
- ✦ 2, 4, 8, 16 Doors Option
- ✦ Flexible Door Grouping
- ✦ Flameproof Option
- ✦ Programmable at Site



BIO. & CARD READER



DOOR EXIT SWITCH



DOOR POSITION SENSOR



EMERGENCY SWITCH



DOOR LOCK- EM



DOOR INTERLOCKING SYSTEMS DOOR ACCESS CONTROL



Introduction

Door Interlock System Is Used To Prevent The Simultaneous Opening Of Multiple Doors. The System Aids In Minimizing The Microbial, Particulate Contamination And Helps Maintaining Pressure Difference Between Two Rooms. Research Laboratories Wherein The Security Is Of Major Concern As It Is Vulnerable To Threats Like Product Tampering This Can Be Neutralized By Restricting Access Of The Unauthorized Users In The Secured Premises.

Application

- ✦ Clean Room Airlock With Multiple Doors
- ✦ Multi-door Sterile Interlock With AHU Interlocks
- ✦ Clean Room Garment Locker
- ✦ Pass Box & Bio Clean Workbench
- ✦ Dual 2-door Interlock For Bank Strong Rooms
- ✦ Operation Theatres And ICU's
- ✦ Air Showers, Air Locks
- ✦ Hospital- Between 2 Room & A Common Washroom

Key Features

- ✦ Door Interlock For The Clean Rooms And Other Production Facilities For Good Manufacturing Practices.
- ✦ Single Controller Can Control 2,4 & 8 Door Systems And Its Go Maximum Up To 16 Doors With Cascade Feature
- ✦ Dedicated Ports For Emergency Switches & Door Position Sensor
- ✦ Available In Soft Touch Keyboard, Contact Less Ir Reader, Biometric Thumb Reader Or With Access Card Reader As Per App. Demands.
- ✦ Access Control Measures To Restrict Movements Of Personnel Across Production Facility To Prevent Contamination Us Fda Guidelines.
- ✦ Biometric Logical Access For Critical Pharma Machinery Integration Possible.
- ✦ 21 CFR Part 11 Compliant Software.
- ✦ Special Product For Data Centre And Server Room.
- ✦ Audio & Visual Indications & Flameproof Options Available
- ✦ Access Control At Any Other Vital Points Where It May Be Necessary To Restrict Or Regulate Entry.
- ✦ Enterprise Level In-house Developed Cloud Based Software With A Number Of Useful Reports And Analysis For The Management.

UNITECH Have Ready Solutions To Assist The Pharma Sector In Good Manufacturing Practices (GMP), Such As:

UNITECH- SOLUTION

✦ Door Interlocking System (DIS) for Clean Rooms etc, ✦

To Control Dust/ Airflow/Temperature and Maintaining Pressure Difference Between Two Rooms. The Basic Logic of DIS says that a Door will Open only If One or More Doors, Under the given Logic, are Closed. The Door Logic is Authorised User Configurable. For Example, while Door 1 is Open, Door 2 may Open, but Not Door 3 which will Open only when Door 1 is Closed. Smart DIS can Control up to 8 Doors, Interlocking them in a Single Loop.

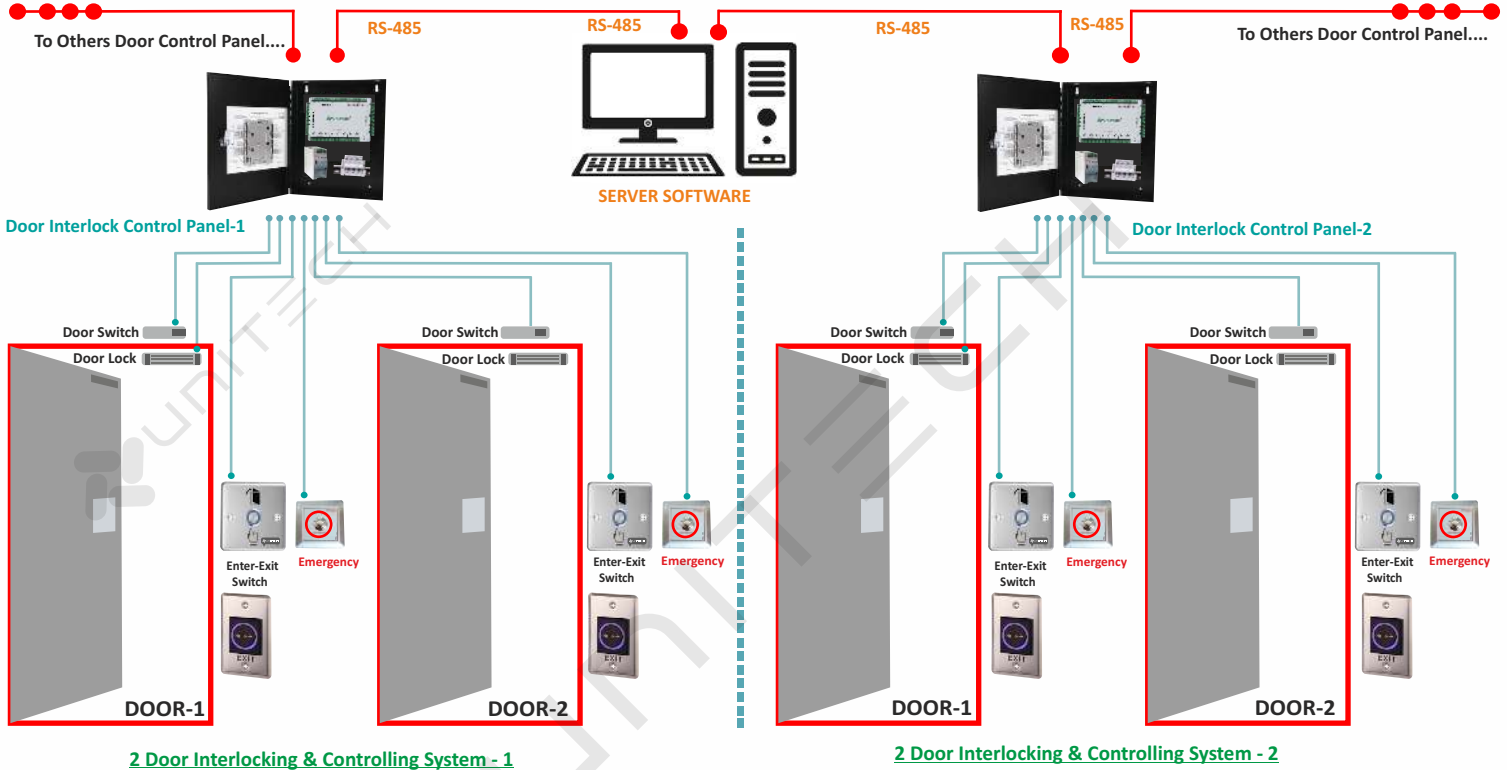
✦ Access Control System for Production/Admin/Lab with Restrictions as per US FDA Policy ✦

If a User is Permitted Entry to one type of Lab, he will be Denied Entry to Another Lab on the same day, to Prevent Cross Contamination, in Keeping with "Good Manufacturing Practices (GMP), for Finished Pharmaceuticals".
Access Control at any other Points of Entry:- It may be Required to Restrict or Control Access at a Number of Other locations in a Pharma Facility. Smart DIS Systems can be of Assistance. Biometric Logical Access Integration with PLC Helps Ensure that the Production of a Batch Commences only when Authorised by the QA.
Rank Level Access Control in the Data Centres and Server Rooms.

✦ Door Lock & Access Control Software as per 21 CFR Part 11 Compliant ✦

The Smart I Access Control Software is 21 CFR Part 11 Compliance. It has MS SQL Database at the Back-end and Generates a Complete Log Files for all the Transactions/Events/Changes/Editions in the Software. Web Based Enterprise Level In-House Software:- Enterprise Level In-House Developed Web Based Software Platform with a number of very useful MIS Reports and Analysis for the Management.

DOOR INTERLOCKING SYSTEM (DIS) FOR CLEAN ROOM AREA.



DOOR INTERLOCK SYSTEMS FEATURES

Door Interlocking Solution for Several Application: UNITECH Offer options for 2 Door / 8 Door / 16 Door Interlocking Solution.

- + 2 Door Interlocking
- + 4 Door Interlocking
- + 6 Door Interlocking
- + 8 Door Interlocking
- + 3 Door Interlocking
- + 5 Door Interlocking
- + 7 Door Interlocking
- + 9 to up to 16 Door Interlocking

Door Interlocking:- UT-1450 Has Inbuilt Configurable Door Interlocking Facility So That If One Door Is Open, Some Or All Of The Other Three Will Remain Closed. The Logic Can Be Defined By The User On Site Through The Controller Keypad.

Emergency Switch as per User's Requirement

- + Centralize Emergency Switch - External Centralized Emergency Switch to Open all Doors at a Time of Emergency.
- + Emergency Switch at Every Door - Facia Plate has Inbuilt Features to Open the Door at the Time of Emergency by Pressing and Holding it Till 5 Second or more (Configurable)

Choose Interlock Logic Type of Operation as per Requirement

- + TYPE- A: All Doors Normally Unlocked, Opening any Door Causes all Other Doors to Lock
- + TYPE- B: All Doors Normally Locked. When any Door is Unlocked all Other Doors are Incapable of Unlocking
- + TYPE-C: Flexibly Select Combinations of Doors to Lock or Unlock
 - On site Program to have Multiple Interlock Logic for Same Door
 - Decide Door Lock Behaviour based on Surrounding Door Status
 - Door Grouping Through Software

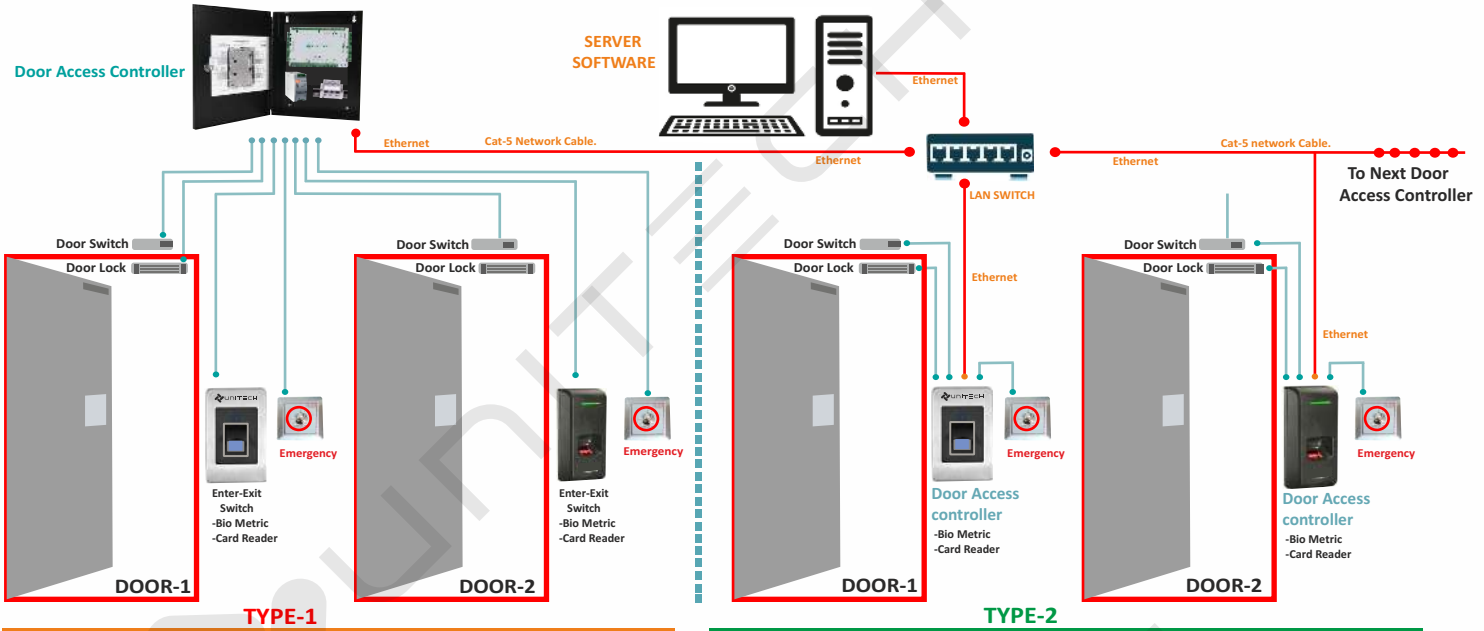
Customizable Options to Making More User Friendly Single Product for all Application.

- + Door type : With and Without Switch
- + Door Interlocking Group
- + Lock Open Time : Auto Magnetization After Preset Time
- + Buzzer Sound Type and Time
- + Max Door Open Time : Generate Alarm to Prevent Door Being Opened for too Long

Define Triggers and Actions Based on Field Events

- + Start and Stop AHU
- + Fire Emergency Cluster Wise
- + Start/Switch Lights
- + Unlock all Doors
- + Start Hooter

ACCESS DOOR INTERLOCKING SYSTEM (ADIS) FOR PHARMA.



Type Of Controlling Strategy

- + Type 1 - Slave Reader can Read Only User and Master Controller has all Door Interlock Logics and Generate Logic (control) from Master Only.
- + Type 2 - Standalone Controller with Built-in Door Interlock Logic- RS-485 and Ethernet Connectivity.

Key Features & Benefits

- + Inbuilt Web Server Access controller can be Managed Remotely Through Inbuilt Web Server Using any Web Browser.
- + Access Controller can Connect to Biometric + Card Reader , is very Fast and Efficient in all Processing and Communication Functions.
- + User Programable Door Interlock System, This System is Designed to Suit Modern Door Interlocking Requirements. Controller can also be Interface with any Access Controller. Controller has Master-Slave Configuration and can be Configured to Total 8 Doors in one Loop.
- + Controller has MODBUS/ 485 Or Ethernet Connectivity Option for Integration with Third party BMS (Building Management System).
- + SNMP Alerts:- SNMP Alerts for Integration with IT System Administration Software for Monitoring Critical Events i.e. Door Left Open, Unauthorized Access Attempt, Power Fail and Battery Low Alerts, etc...
- + Alarm Management Software Module:- CCTV/IP Camera Integration with Access Events for Security Audit or to Verify/Identify Tailgating, made Effective by Alert based Network Protocol.
- + In Case of Power Fail and Low Battery Alerts:- Alert is Sent to Admin for Power Management/Arrangement in the Low Battery Situations which helps in Implementing the Utility of Both the Lock Conditions, 'Fail Safe' as well as 'Fail Secure'.

In House Developed Web Or Windows Base Enterprise Software

- + Remote Controller Configuration Through Server Software form any PC.
- + Software has Ethernet, RS485 based Communication Options.
- + USB for Configuring Parameter of Controller and Data Logging.
- + RTC Option Available witch is Synchronised for Web Server Software.
- + Read Door Status and Door open Time on Server Software for Management's Detail Studies.
- + Inbuilt Web Server - Firmware can be Managed Remotely Through Inbuilt Web Server Using any Web Browser.
- + SNPT ALERTS :- SNMP Alerts for integration with it System Administration Software for Monitoring Critical Events i.e. - Door Left Open, Power Fail & Low Battery Alarm. Unauthorised Access Attempt etc.
- + Alarm Management Software Module IP Camera Integration with Access Event for Security Audit or to Verify / Identify Tailgating made Effective by Alerts Based on Network Protocol.



Ordering Information

Model Code	Product Name	Item Description							
UT-1450	Door Interlock Controller & Door Access Controller								
		Order Code	Model :-UT-1450-1	Model :-UT-1450-2	Model :-UT-1450-3				
	Nos. Of Door	2,3,4 Door Controller	5,6,7,8,16 Door Controller	Up to 16 Door Access Cont. For Card Or Biometric					
	An Electromagnetic Door Lock Consists of an Electromagnet and an Armature Plate. & Door Position Sensor								
		Order Code	EML-600	EML-1200	EMLDB	EML-FLP			
		Holding Force	600 LBS/280 KG	1200 LBS/540 KG	600 LBS/280 KG	600 LBS/280 KG			
		Dimension	250x 50 x 27 mm	500x 50 x 27 mm	220x 50 x 27 mm	On Deamand			
	Door Open Switches								
		Order Code	DSS	DSM	DSSL	DSML	DSNTS	DSNTM	DSFLP
		Button Type	Push type Small & Big		Push type With LED Small & Big		No Touch IR With LED Small & Big		No Touch IR With LED Flame Proof
		Dimension	Small- 90(H) x 30(W) mm Big - 90(H) x 90(W) mm		Small- 90(H) x 30(W) mm Big - 90(H) x 90(W) mm		Small- 115(H) x 70(W) mm Big - 86(H) x 86(W) mm		On Deamand
	Card Or Biometric Reader & Controller								
		Order Code	BR	BCR	BCSC				
		Type	Biometric Reader	Biometric + Card Reader	Biometric + Card Controller-Standalone				
	Monitoring Software	Server base SCADA		Windows base SCADA					
		Order Code	SC	WC					
		Type	Access Management Software		Access Management Software				
	Emergency Open	Central Emergence Switch		Individual Emergence Switch					
		Order Code	CE	IE					
		Type	Central Emergence Switch	Individual Emergence Switch					

TECHNICAL SPECIFICATION :

OUTPUT	<ul style="list-style-type: none"> Up to 16 Potential Free Output Relay Contact Rating : 1.0 Amp for 12 V DC Door EM LOCK Contact X 8 nos. DOLT Buzzer Contact X 8 nos.
INPUT	<ul style="list-style-type: none"> Total 18 Optically Isolated Inputs EM lock Contact 8 Nos. Door Position Switch Contacts 8 Nos. Emergency/Fire Contacts 2 Nos.
COMMUNICATION OUT	<ul style="list-style-type: none"> Quantity of Communication Port: 2 RS-485, 1 Ethernet Port & Wi-Fi RS-485 Signal: D+, D-, GND. Salve ID: User Programmable (1-255)
COMMUNICATION INPUT	<ul style="list-style-type: none"> Slave Up to 50 nos. Reader RS-485 Signal: D+, D-, GND RF Card Reader Or Biometrics Reader
MEMORY	<ul style="list-style-type: none"> Up to 8 MB (Flash)
CONFIGURATION	<ul style="list-style-type: none"> WEB Configuration from RJ45 Ethernet Port Windows Configuration Tool
PROGRAMMABLE PARAMETERS	<ul style="list-style-type: none"> Door Open Time Settings & Lock Time Setting, Valid Open Time Setting Buzzer Sound Type & Time Door Interlock Grouping
INDICATION	<ul style="list-style-type: none"> Power Supply Indicator, Ethernet port Indicator, RS-485 Port Indicator
POWER SUPPLY	<ul style="list-style-type: none"> 230 V AC Supply
PHYSICAL CHARACTERISTICS	<ul style="list-style-type: none"> Housing: MS Powder Coated Installation: wall Mounted Or Panel Mounted. Dimension (250-W x 250-H x 50-D):
STORAGE TEMP.	<ul style="list-style-type: none"> Max 40 °C to 85 °C
OPRATIGE TEMP.	<ul style="list-style-type: none"> Max 40 °C to 85 °C

DOOR INTER LOCK TOPOLOGY



DOOR INTER LOCK I'Os

	2	3	4	5	6	7	8
	Door	Door	Door	Door	Door	Door	Door
Electromagnetic Lock Output	2	3	4	5	6	7	8
Doors Open Switch	4	6	8	10	12	14	16
Doors Position Sensor Input	2	3	4	5	6	7	8
Buzzer Output	2	3	4	5	6	7	8
Digital Input	4	4	4	4	4	4	4
Digital Output	2	2	2	2	2	2	2