



SMART FIRE SAFETY AND EMERGENCY



Introduction

One of the most crucial safety aspects of any building is ensuring that all the necessary fire safety and emergency measures are in place & well maintained. As such Building Fire code spell out clearly maintenance regime to ensure fire safety & emergency always at optimal condition.

Currently all fire safety and emergency equipment must be inspected by a specialized operator. These check are carry out manually every month and/or yearly depending on the type of equipment. Laborious & repetitive work.

Lingjack DiGiTaL's SMART Fire Safety and Emergency System are build to control the condition of all the fire safety & emergency equipment in real time in the building with our centralize digital Platform and Mobile Apps. E.g Sprinkler system , hose reel system , Fire extinguisher, Emergency luminaries etc..

As a result users will have an overview remotely of all the fire safety and emergency equipment on the building 24/7 and will be notified immediately after an abnormal condition is detected by our automatic monitoring system. Hence an automatic system is going to provide the confidence that all the fire safety and emergency equipment in the building are in their optimal condition in the case there is fire.

Moreover, this would contribute to economic saving, since it would no longer be necessary for operators to go for periodic manual inspections. Remote 24/7 monitoring & control give 100% assurance automated system always in optimal condition.

SMART Fire Safety and Emergency

Objectives:

- 1. Able to overview remotely of all the equipment in the building in one platform without going to site.
- 2. Faster rectification of abnormal condition with mobile notification without going to site.
- Data can be use for predictive maintenance and resolve potential incident. E.g data show constant activation of jockey pump means system leakage is high and need to be rectified immediately.
- 4. Maintain optimal condition for Fire Safety and emergency equipment in the building giving users peace of mind .
- 5. Redeploy of maintenance team for non repetitive work.







Key Product Features

Non-Intrusive Implementation

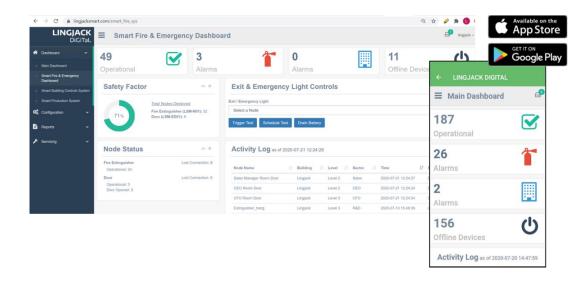
Wireless, High Availability & Secure

Flexible, Expandable, Customizable

Easy to Deploy Architecture

- ✓ Easy to add new capabilities whenever needed.
- ✓ SMART Presence: Always Present,
- ✓ High Availability Connectivity with Secure, Fully Mesh Wireless Architecture.
- √ No more wires: Low power wireless technology, battery operated (~ 5 years with active battery status).
- ✓ Automatic and optimal link routing with intelligent re-routing in event of link failures.
- ✓ Supports up to 10,000 sensor nodes or devices per networks.

SMART COMMAND CENTRE couple with MOBLIE APPS: AnyTime, AnyWhere, Live Interactive & Secure Monitoring and Control



- ✓ Secure with SHA 256bits RSA Encryption with Password Control.
- Interactive Graphical User Interface.
- Available on Web and Mobile App.
- ✓ Full Activity Log,
- ✓ Event and Alerts Management
- ✓ Remote Activation of Built In Test
- ✓ Maintenance Planning, Schedule Tests.
- ✓ Servce History, Report Generation.

Independent Node-Level Logic Decision and Control

 Supports continuous operation with local logic decision and control within Nodes for critical systems.

Certifications, Compliance

- ✓ FCC approval.
- ✓ IMDA approval.
- ✓ ACMA Radio communication (Low Interference Potential Devices)
- ✓ Compliant mesh enabled (2.4GHz, IEEE 802.15.4).





Key Specifications		
Systems Configuration	Gateway	LAN, Wifi Internet Connecting Gateway
	Fire Extinguisher Node (Hook)	Temperature, Humidity, FE Missing, Leaked, Blocked
	Fire extinguisher Node (Platform)	Temperature, Humidity, FE Missing, Leaked, Blocked
	Emergency Door Node	Obstruction
	Temperature Humidity Node	Temperature, Humidity. Option: Sound, Light, CO2, Vibration
	Hose reel Water Leak Node	Temperature, Humidity, Water Leakage
	Emergency and EXIT Light monitoring & Testing Node	Temperature, Humidity, Light, Remote Automatic Testing of Light Output, Standby Battery
	7 in 1 Indoor Air Quality (IAQ) Node	7 in 1 Air Quality Sensor, CO, VOC etc
	Smart Dashboard, Live and Interactive Dashboard	Web & App based Dashboard for Monitoring and Controllphone IOS, Andriod Based App
Communications	Topology	Self Healing Mesh
	Frequency	2.4GHz Bluetooth 5.0, IEEE 802.15.4,
	Range	Typical Range (Line of Sight): Indoor 30m (max), Outdoor 150m (max)
Environment	Operating Temperature, Humidity	0°C to 55°C, 90% Relative Humidity
	Enclosure	IP 52
Power	Battery (except for Gateway)	Lithium Battery 3.7V, 8500mAh (~ 5 years battery live with active status monitoring)

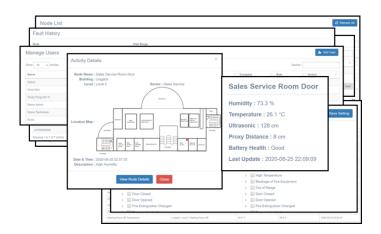




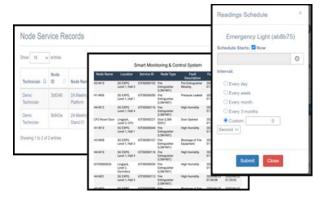
Fire Safety Compliance and Data Analytic Features

Our Digital platform come with a whole set of backend support module to manage the maintenance operation, most importantly full compliance to Fire Code. Also using Big Data to do Data Analytic to improve building overall fire safety and emergency.

- ✓ Online control to initiate test and maintenance activities.
- Demonstrate Compliance with servicing history and time stamp and testing outcome.
- ✓ Inventory Management module
- ✓ Reports Generation based on defined parameters
- ✓ Manage Users and Notification Settings.







Data Analytic capabilities

- ✓ Equipment Failure rate analysis
- ✓ Traffic Flow pattern
- ✓ Areas usage rate
- ✓ Building occupancy trends
- ✓ Areas prone to Fire , Hot Spot Analysis





Service and Support

Standard and Premier Services

- ✓ Comprehensive Support Services (Monitoring, Alerts, Onsite Response) to cater to your support and maintenance needs.
- ✓ Leasing and Maintenance Services.
- ✓ Standard and Extended Warranty Services
- ✓ After-Sales Services eg. Site-Servicing, Software Maintenance, Training, Spares.



About LINGJACK DiGiTaL

- ✓ Lingjack believes in Innovation. We believe that we can incorporate Digitalization and Technology in our operations and business. In 2017 we formed our own R&D team to conceptualize and develop technology products.
- ✓ Lingjack DiGiTaL was formed as an arm of Lingjack Engineering, with the objective to provide Total Solutions that leverage on Technology to deliver Value to our Customers.
- ✓ In 2019, we launched the first SMART monitoring system to enhance the Fire and Safety aspect in a facility in the world. We are also constantly working on AI, data analytics and robotics solutions to our Customers.

Request for a Demo, We Like to Hear Your Needs

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