

## IoT-Enabled Control Panel

For  
Addressable Automatic Fire detection,  
Automated Voice alarm,  
Public Address and  
Talkback System -1 Loop

Model-**FAPATB-IoT -101L**



### Unified Life-Safety Platform

The AL-FAPATBCP-lot-101L is a centralized, fully integrated control panel engineered to deliver comprehensive life-safety management for complex and high-occupancy buildings. This intelligent system combines addressable fire detection, dynamic voice evacuation, public address, talkback communication, and IoT-enabled remote monitoring in one powerful platform. Designed in full compliance with NBC 2016, it provides real-time data upload, cloud-based access, and seamless integration with building management systems.

## Core Features

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### **Two-Wire Loop Technology**

Power, audio, and data on a single 1-Core loop, minimizing cabling costs and installation complexity.

### **AI-Driven Voice Evacuation**

Dynamic text-to-speech evacuation Messages without pre-recorded files for flexible emergency response.

### **IoT Connectivity**

Embedded server enables remote access via LAN/Wi-Fi. Real-time sensor data continuously uploaded to cloud.

### **Automated Self-Diagnostics**

Continuous device health and loop integrity monitoring with predictive maintenance capabilities.

### **Multi-Device Compatibility**

Supports smoke detectors, heat detectors, manual call points, and various fire safety sensors.

### **Modular Design**

Plug-in boards for simplified Maintenance and scalable expansion as system requirements grow.

### **Smart Platform Integration**

Compatible with platforms like Smarter Spider for enhanced visibility and centralized monitoring.

### **User-Friendly Setup**

Configure via touchscreen or Excel upload—no dongles, special PCs, or proprietary software required.

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## IoT Integration & Remote Monitoring

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### Cloud-Based Access

- 24/7 remote access via web browser
- Mobile device and PC compatibility
- Real-time system supervision and control
- Continuous sensor data upload to cloud

### Smart Monitoring

- Temperature and smoke level tracking
- Automated alerts for faults and maintenance
- Intelligent, data-driven alarm logic
- Integration with Building Management Systems

## Core Functions

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- ◆ **Manual Operated Electronic Fire Alarm (MOEFA):** Addressable manual call points for emergency activation.
  - ◆ **Zone-Based or Global Paging:** Targeted or building-wide announcements with precise control
  - ◆ **Two-Way Talkback:** Real-time communication with caller location display for emergency coordination
  - ◆ **Automatic Fire Detection:** Instant fire zone and device identification upon alarm activation
  - ◆ **System Integration:** Interfaces with pumps, fans, sprinklers, lifts, and ventilation systems
  - ◆ **Fault Management:** Short-circuit detection, isolation, and precise fault pinpointing
  - ◆ **Emergency Lighting:** Automatic activation of escape route lighting systems
  - ◆ **Output Control:** Activates alarms, suppression systems, and emergency notifications automatically
  - ◆ **Parameter Monitoring:** Tracks hydrant pressure, sprinkler system status, and panel performance in real time.
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## Technical Specifications

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### Electrical Specifications

Parameter	Specification
Primary Power Supply	220V $\pm$ 10% AC
Number of Loops	1 Addressable Loops
Addressable Capacity	Up to 127 devices per loop
Maximum Signal Loop Current	1000 mA
Loop Resistance	40 ohms
Wiring	2-core cable
Wiring Type	Class A / Class B Style

### Mechanical Specifications

Parameter	Specification
Enclosure Dimensions (H×W×D)	550 × 380 × 125 mm
Front Door Dimensions (H×W×D)	560 × 393 × 11 mm
Housing Material	16 Gauge CR Sheet
Black Box Finish	Black Matte
Front Door Finish	Texture Red
Display	8" Color Touchscreen

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## Applications

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▸ High-rise residential complexes

▸ Commercial buildings & malls

▸ Hospitals & healthcare facilities

▸ Airports & metro stations

▸ Transport hubs & terminals

▸ Industrial facilities

▸ Mission-critical installations

▸ Educational institutions

## Compliance & Standards

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NBC2016 - Part 4

IS 2189

Fire Command Center Ready

Fully compliant with National Building Code 2016 and Indian Standard IS 2189 for Fire Detection and Alarm Systems. Supports regulatory requirements for early detection, Automatic system response, continuous operational supervision, and direct communication with Fire Command Centers.

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## Why Choose AL-FAPATB-IoT -101L

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- ◆ **NBC 2016 Compliant:** Specifically designed for Fire Command Centers with full regulatory adherence
- ◆ **All-in-One Integration:** Fire detection, PA, voicealarm, talkback, and IoT monitoring in single platform
- ◆ **Scalable Architecture:** Suitable for buildings of all sizes and complexity levels
- ◆ **Cost-Effective Installation:** Two-wire loop technology minimize scabbling and installation expenses
- ◆ **Low Maintenance:** Modular design with automate diagnostics reduces down time and service costs
- ◆ **No Training Required:** Intuitive touch screen operation—no specialist training or extra software needed
- ◆ **Future-Ready:** IoT connectivity ensures compatibility with emerging smart building technologies

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### Contact Information

AIRLIGHT Naveen alarm systems

Web: [www.airlight.in](http://www.airlight.in)

### Product Information

For detailed technical documentation, installation guides, and product support, Please visit our website or contact your local Airlight representative.