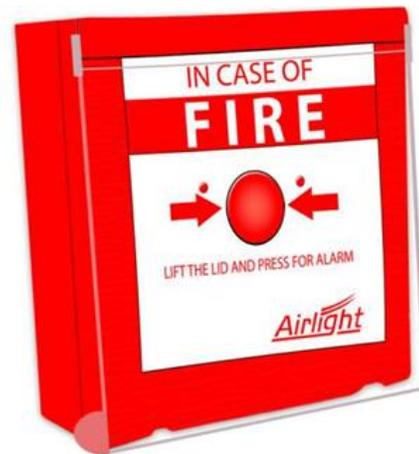# DATASHEET

IoT-Enabled

Addressable

Manual Call Point

Model-**AA-IoT-CP-104**

Intelligent Manual Fire Alarm with IoT Intelligence

The Airlight AA- IoT-CP-104 is an IoT-enabled addressable manual call point designed for manual fire alarm activation with cloud-connected monitoring capabilities. This intelligent device transmits real-time activation events, precise location data, and operational status to the fire alarm control panel which is seamlessly uploaded to the cloud via internet connectivity. Designed in full compliance with NBC 2016 and international standards (UL 38, EN 54-Part 11), it features bold, highly visible design ensuring easy identification from long distances. The aesthetic design aligns cohesively with other Airlight fire alarm devices including Talkback Speakers and Speaker Beacons for unified system appearance. The protective flip cover is crafted from strong, transparent polycarbonate ensuring durability while maintaining visibility. Featuring large, prominent push button with electronic latch circuit, the device requires no extra key for resetting—remote reset capability from control panel eliminates manual intervention. Dual redundant LEDs provide synchronized blinking during scan and steady glow during alarm for enhanced reliability. IoT connectivity enables remote monitoring of all activations, location tracking, response time analysis, and comprehensive system diagnostics, empowering facility managers to verify emergency response procedures and maintain system readiness from any location worldwide.

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Core Features

- ➢ IoT Connectivity
- ➢ Location Tracking
- ➢ Dual Redundant LEDs
- ➢ Cloud Activation Logging

- ➢ Remote Reset
- ➢ Transparent Cover
- ➢ Cohesive Design
- ➢ Bold Visible Design

- ➢ Electronic Latch
- ➢ Large Push Button
- ➢ Addressable Control
- ➢ NBC 2016 Compliant

IoT & Smart Monitoring Capabilities

Real-Time Call Monitoring & Cloud Upload

Every manual activation is instantly transmitted to control panel with precise device location, timestamp, and activation context. All events automatically uploaded to cloud for remote monitoring, compliance documentation, and emergency response analysis.

Intelligent Event Alerts

Instant cloud-based notifications for manual activation, precise location identification, device status changes, connectivity issues, and maintenance requirements. Multi-channel alerts ensure rapid awareness and coordinated emergency response capability.

Activation Pattern Analytics

Cloud-based analytics track activation frequency, response times, drill performance, false alarm patterns, and system usage by location. Historical data enables emergency procedure optimization, training needs identification, and false alarm reduction strategies.

Remote Access & Management

Facility managers and emergency response teams can monitor all manual call point activations, track response times, verify alarm procedures, and access historical activation records through web-based platforms and mobile devices from any location worldwide.

Precise Location Tracking

IoT-enabled location identification instantly displays exact call point position on control panel touchscreen and cloud dashboard. Emergency responders can immediately identify activation location and navigate to precise area for rapid response and investigation.

Remote Reset Capability

Electronic latch enables remote reset from control panel without physical key access. IoT connectivity allows authorized personnel to reset devices remotely after incident verification, eliminating on-site visits and enabling faster system restoration to normal operation.

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Bold Design & Enhanced Visibility

Big & Bold Aesthetic

Designed to be highly visible and easily identifiable from long distances. Bold red housing with prominent size ensures occupants can quickly locate emergency activation points during stressful emergency situations requiring immediate fire alarm activation.

Transparent Protective Cover

Flip cover manufactured from strong, transparent polycarbonate material provides robust protection against accidental activation while maintaining excellent visibility. Durable construction withstands repeated operation and environmental exposure without yellowing or cracking.

Dual Redundant LEDs

Two independent LEDs provide enhanced reliability and visibility. LEDs blink synchronously during normal scan operation, ensuring operational status verification from multiple viewing angles. Dual-LED redundancy ensures continued indication even if one LED fails.

Cohesive System Appearance

Aesthetic design aligns seamlessly with other Airlight fire alarm devices including Talkback Speakers, Speaker Beacons, and detectors. Unified design language creates professional, cohesive appearance throughout facility for enhanced brand consistency and visual appeal.

Large Prominent Push Button

Monitors fire pump running status, controller operation, power supply status, and pump room environmental conditions. Ensures fire pump readiness and detects pump operation during fire events or routine testing procedures.

High-Visibility Alarm Indication

During alarm activation, dual LEDs provide steady glow for clear, immediate visual feedback confirming successful alarm initiation. Enhanced visibility ensures occupants understand alarm has been activated and emergency response is underway.

Advanced Electronic Latch System

Electronic Latch Circuit

Advanced electronic latching mechanism maintains alarm state until deliberately reset. No mechanical components to wear out or fail over time. Electronic design ensures reliable latching performance throughout extended service life.

Cloud-Based Reset Logging

All reset operations automatically logged with timestamp, user identification, and reset reason. Cloud storage provides complete audit trail for compliance verification, insurance documentation, and emergency procedure review.

Keyless Remote Reset

Eliminates traditional mechanical key requirement for reset operations. Authorized personnel can reset devices remotely from control panel after alarm investigation and clearance, streamlining post-incident procedures and reducing operational downtime.

Simplified Maintenance

Electronic latch eliminates need for spare keys, key management procedures, or lock maintenance. Remote reset capability reduces maintenance visits and associated labor costs while ensuring faster system restoration after activations.

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Operating Principle

Continuous Status Monitoring: Device continuously communicates with control panel through addressable loop, verifying operational readiness and reporting status during regular scan cycles.

Manual Activation Process: When occupant opens protective cover and presses large push button, electronic switch activates and device immediately transmits alarm signal with unique address to control panel.

Electronic Latch Engagement: Electronic latch circuit engages upon activation, maintaining alarm state and LED indication until deliberate reset command received from control panel.

Instant Location Identification: Control panel receives device address and instantly displays precise call point location on touchscreen with zone information for rapid emergency responder navigation.

Cloud Data Transmission: Activation event details including location, timestamp, device ID, and activation context automatically uploaded to cloud servers for remote monitoring and logging.

Fire Alarm System Response: Control panel processes activation signal and initiates complete fire alarm sequence including detector polling, voice evacuation, sounder activation, and emergency lighting.

Dual LED Indication: Upon activation, dual redundant LEDs switch from blinking green scan indication to flashing red alarm state, providing clear visual confirmation of successful alarm initiation.

Remote Reset Operation: After incident investigation and clearance, authorized personnel send reset command from control panel. Electronic latch releases, device returns to normal monitoring mode.

Addressable Communication: Two-way digital communication enables device identification, status reporting, remote reset capability, and continuous electrical supervision for enhanced system reliability.

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Technical Specifications

### Electrical Specifications

Parameter	Specification
Operating Voltage	18-24V
Quiescent current	200uA
Alarm current	20mA

Mechanical Specifications

Dimensions	Weight	
120x120x45mm	Without Base	178g
	With base	242g

General Specifications

Parameter	Specification
Operating temperature	-10ºC to 55ºC
Storage temperature	-10ºC to 60ºC
Humidity	0-95% RH (Non condensing)
Colour	Red
Housing	ABS

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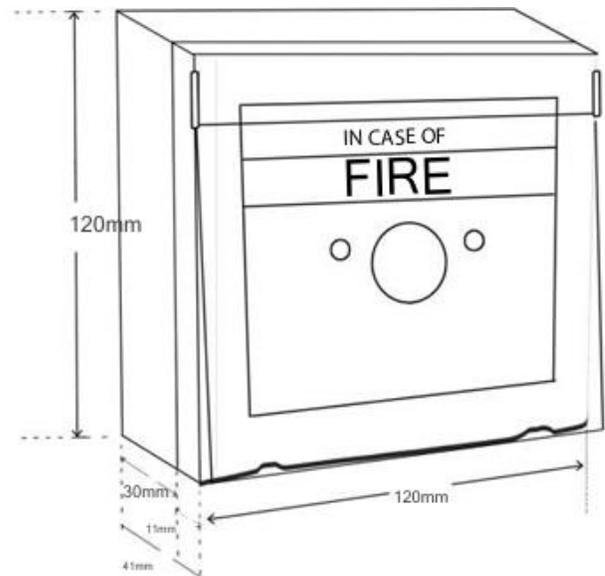
Compliance &Standards

| UL 38 | EN 54 – Part 11 | NBC 2016 | Manual Call Point |

The AA-104CP Manual Call Point is fully compliant with UL 38 (Standard for Manually Actuated Signaling Boxes for Use with Fire Protective Signaling Systems), EN 54 Part 11 (Manual Call Points), and NBC 2016 (National Building Code) regulations, ensuring reliable performance and regulatory compliance for manual fire alarm activation across international markets.

Ideal Applications

- **Commercial Buildings:** Offices, retail spaces requiring NBC-compliant manual fire alarm activation points
- **High-Rise Residential:** Apartments and condominiums with fire safety manual activation requirements on each floor
- **Healthcare Facilities:** Hospitals, clinics requiring manual alarm points for staff-initiated emergency response
- **Educational Institutions:** Schools, colleges with manual call points for fire drill procedures and emergency activation
- **Hotels & Hospitality:** Properties requiring manual alarm activation points in corridors, stairwells, and public areas

- **Industrial Facilities:** Manufacturing plants, warehouses with manual emergency alarm activation requirements
- **Shopping Malls:** Large retail complexes requiring strategically placed manual fire alarm activation points
- **Transportation Hubs:** Airports, metro stations, bus terminals with manual emergency alarm requirements
- **Parking Facilities:** Multi-level parking structures requiring manual fire alarm activation capability
- **Exit Routes:** Stairwells, corridors, exits requiring manual alarm activation per building codes.

Why Choose AD-IoT-CP-104

Cloud-Connected Intelligence: IoT connectivity enables remote monitoring of all activations, location tracking, response time analysis, and comprehensive emergency response analytics

Instant Location Identification: Precise call point location immediately displayed on control panel and cloud dashboard for rapid emergency responder navigation

Bold Visible Design: Highly visible from long distances with bold red housing ensures quick identification during emergency situations

Remote Reset Capability: Electronic latch with keyless remote reset eliminates need for physical keys and on-site reset visits after activation

Dual LED Redundancy: Two independent LEDs provide enhanced reliability with synchronized operation ensuring continued indication if one LED fails

Transparent Protective Cover: Durable polycarbonate flip cover protects against accidental activation while maintaining excellent visibility and accessibility

Large Push Button: Oversized button with clear tactile feedback ensures easy activation during panic situations or when wearing gloves

Cohesive System Appearance: Design aligns with other Airlight devices for professional, unified fire alarm system aesthetics throughout facility

NBC 2016 Compliant: Meets National Building Code requirements for manually operated electronic fire alarm (MOEFA) systems

International Certification: UL 38 and EN 54-11 approvals ensure global standards compliance across diverse markets

Electronic Latch Reliability: No mechanical wear components ensure consistent latching performance throughout extended service life

Comprehensive Event Logging: Cloud-based activation history provides complete audit trail for compliance, insurance, and emergency procedure review

Simplified Maintenance: Remote reset and diagnostic capabilities reduce on-site maintenance visits and associated labor costs

Activation Analytics: Historical data enables drill performance assessment, false alarm pattern identification, and emergency procedure optimization

Ultra-Low Power: 200µA quiescent current ensures minimal power consumption while maintaining continuous readiness for emergency activation

Contact Information

AIRLIGHT Naveen alarm systems

Web: www.airlight.in

Product Information

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