digit force

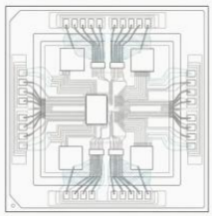


Remote alarm on lifts

This alarm system, through an all-digital technical solution and self-developed algorithms, gives the product a clear advantage in anti-interference performance and transmission speed. Even in complex old elevator renovation scenarios, it can provide stable data transmission capabilities.

The all-digital design also allows the system to have more flexible expansion capabilities, meeting the personalized customization needs of different business scenarios.

The self-developed core chip gives the system additional advantages in stability, development of customization requirements, and cost control.



Self-developed Chip

stability customization development & cost control

Our features

- Mobile communication terminal
- Multi-level loop alarm
- Alarm Records (Audio) Cloud Storage
- Incapacitated Person Automatic Call
- Elevator Performance Monitoring
- Sensor Expansion Interface
- Custom Audio Configuration
- AI Active Noise Cancellation
- System Self-Check
- 4G & Ethernet
- Large network capacity
- Long-distance transmission
- High-speed data transmission
- Electromagnetic interference resistance
- Dual network

System Highlights

Stability

The system is based on a high-speed digital transmission network and utilizes time-division, frequency-division, retransmission, and other technologies to ensure the product's full functionality even in environments with heavy electromagnetic interference.

Easy Maintenance

The system is designed with self-check functions both on the cloud platform and in the underlying hardware products. When anomalies occur, it actively reports fault codes, allowing for quick problem identification, improving maintenance efficiency, and saving labor costs.

High Performance

The maximum transmission rate between the gateway and any single terminal can reach 6 Mbps (the maximum rate within the same network under conditions without strong electromagnetic interference); the communication distance from the gateway to an audio unit can reach 800 meters in non-repeater mode. A single gateway can connect up to 50 audio units.

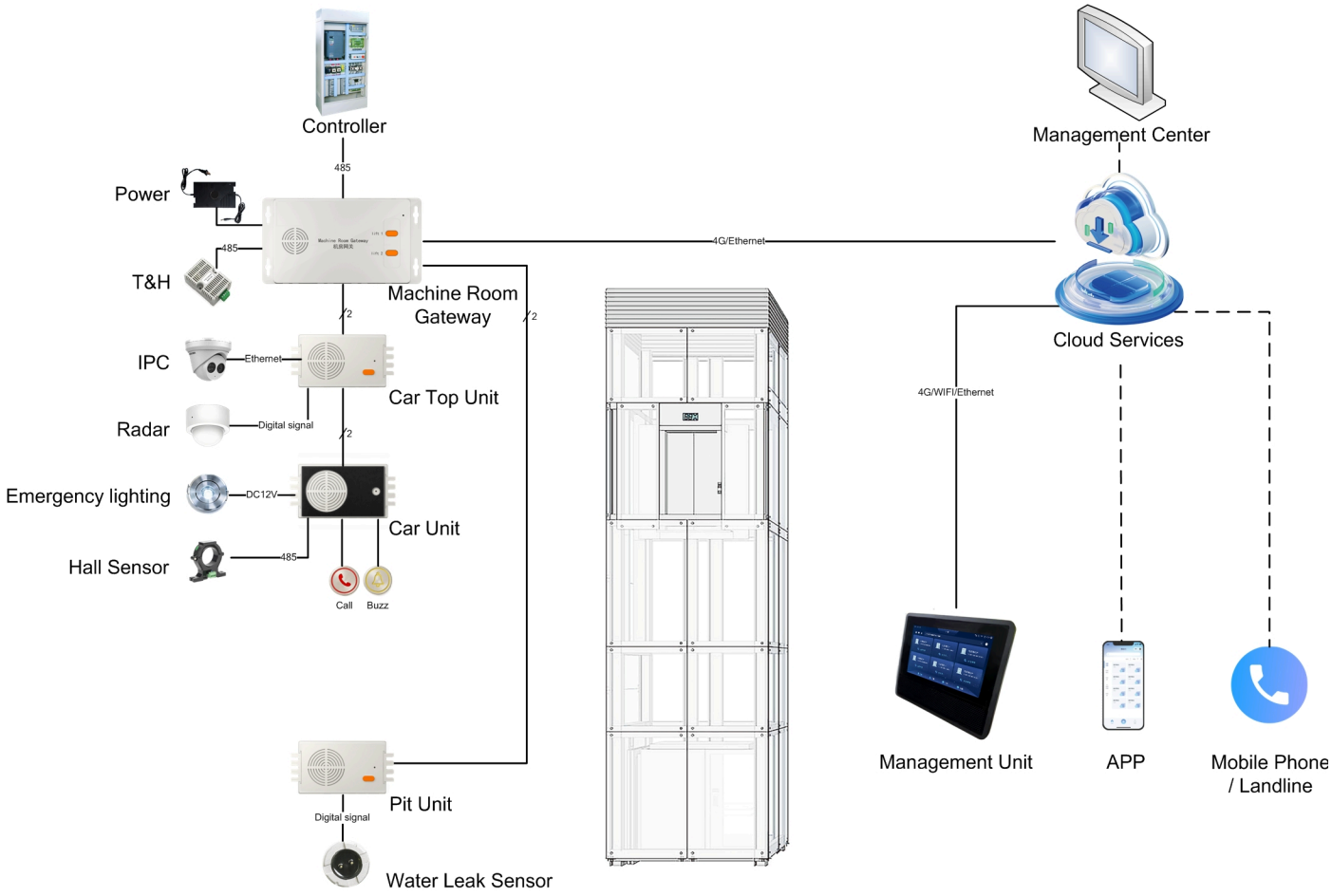
Compatibility

Power and data are transmitted between the gateway and audio units using two cables, supporting the reuse of old wiring.

Flexibility

The system supports any network topology, including tree, star, bus, and hybrid networks; it also does not require distinguishing between positive and negative (direction) on transmission lines.

System Highlights



Technical Specifications



Name: Management Unit

Model: E-M7-A0

Display screen	7", MIPI
touchscreen	Glass
Network connection method	4G/WIFI/RJ45
Power consumption	Static: <2.5W, Dynamic: <5W
Operating voltage	DC 12~15V
Operating temperature	-20~55°C
Operating humidity	10%~95%, no condensation
Power supply method	External power supply, 5.5mm DC round connector
Product Dimensions	216mm*174mm*66mm (excluding antenna)
Shell material	plastic



Name: Machine Room Gateway

Model: EL-MRAE-A0

Supported number of elevator connections	2/4 units (Related to the model)
Supported audio unit number	32-50
Network connection method (Wide Area Network)	4G/Ethernet
SIM cards	Micro SIM * 1，eSIM * 1
Network connection method (inside the elevator)	Digital two-wire network, 4-way
microphone&speaker	Integrations
Expansion ports	485,DC output,digital input
Power consumption	Static: <1W, Dynamic: <2W
Operating voltage	DC 12~15V
Operating temperature	-20~70°C
Operating humidity	10%~95%, no condensation
Product Dimensions	200mm*105mm*25mm (including lugs)
Shell material	plastic

Technical Specifications



Name: Car Top Unit

Model: EL-CRAE-A0

&

Name: Pit Unit

Model: EL-PAE-A0

Network connection method (inside the elevator)	Digital two-line network
DC output	Route 1, 200ma
digital input	Route 1
Ethernet	Route 1 (By default, only "EL-CRAE-A0" is satisfied.)
Elevator operation monitoring	have
Power consumption	Static: <1W, Dynamic: <3W
Operating temperature	-20~70℃
Operating humidity	10%~95%, no condensation
Product Dimensions	128mm * 64mm * 22mm (including lugs)
Shell material	plastic



Name: Car Unit

Model: EL-CARAE-A0

Network connection method (inside the elevator)	Digital two-line network
DC output	1 channel, Max. 3W (IO control)
digital input	Route 2
485	Route 1 (By default, only "EL-CRAE-A0" is satisfied.)
Elevator operation monitoring	have
Power consumption	Static: <1W, Dynamic: <3W
Operating temperature	-20~70℃
Operating humidity	10%~95%, no condensation
Product Dimensions	128mm * 64mm * 32mm (including ear loops and sponge)
Shell material	plastic

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