

Innovative wireless solution

Air@ -EL100 series

LED optical video transmission system for elevator CCTV



What is Air@-EL100?

Air@-EL100 is a **LED** optical video transmission system which is specially designed for elevator CCTV security system to solve the cabling and installation problems.

Rising of huge installation and cabling problems from elevators, CCTV security system uses existing cables, it will affect the safe operation of elevator. In addition, unnecessary and additional maintenance and inspection costs occur.

Air@-EL100 provides an attractive wireless video transmit solution for elevator at easy installation and low cost, replacing the coaxial cables and the others. Because it transmits DVD quality video using an optical LED, cabling complexity, installation costs, and maintenance issues are drastically reduced. With a much longer lifespan than traditional 'moving coaxial cable' systems, the elevator operation, security, and safety are also increased.

Why Air@-EL100?

Air@-EL100 has a lot of advantages and benefits as compared with coaxial cables and point-to-point RF/Microwaves.

Maintenance Free and Cost-Effective (No more cabling problems)

High quality image transmission (DVD** video quality)** • Max up to **100m(328ft)** Operational Distance

Real time Transmission and No Latency

Semi-permanent life span (Long-lasting product)

Quick and easy installation • Cost saving system on establishment and maintenance

Complete substitution • Compatibility with all existing CCTV and peripherals

No RF interference and Intercept

Immune to disturbance by Dust and Noise

No influence on Traveling Cable

Comparison Table between Coaxial Cable and Air@-EL100

(Case profile: 25 floors high rise building / Internal data)

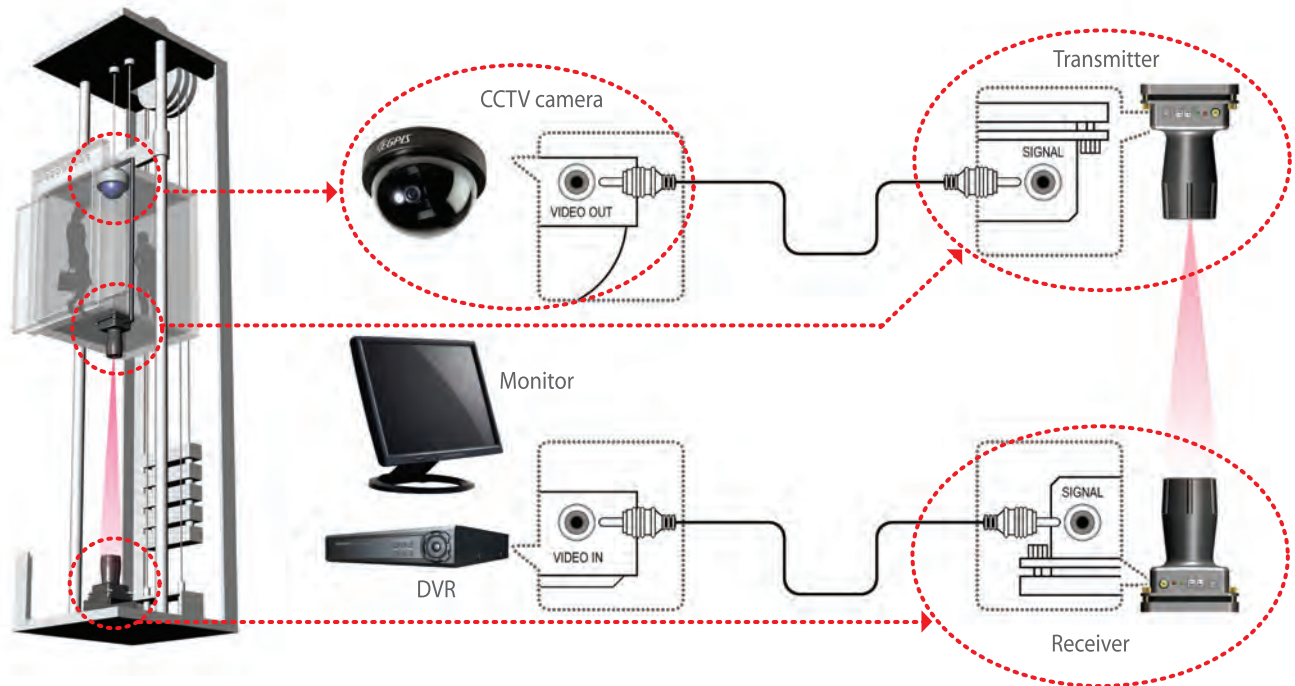
	Conventional Coaxial Cable	Air@-EL100
Number of Installers	3	2
Hours of Installation	3	1
Maintenance & Repair Cost	<ul style="list-style-type: none">• Frequent cable damage from operation friction• Regular maintenance check is required• New cable wiring is necessary when there is cable damage.(Cable damage can occur every 8 month in average)• High labor cost and elevator operation halt• High material cost (need to use stranded types flex coaxial cable)• Buildings higher than 25 floors need more installation & maintenance cost, troubles	<ul style="list-style-type: none">• No Maintenance• No repair• Semi-Permanent life span• No cost increases. Operation range up to 100m(328ft) height building
Troubles and safety	<ul style="list-style-type: none">• Cracking in coaxial cable causes intermittent video signal drops• Coaxial cable can be trangled with elevator traveling cables, raising safety concerns	<ul style="list-style-type: none">• No cable-related problems
Warranty	<ul style="list-style-type: none">• No Warranty	<ul style="list-style-type: none">• 3-year warranty from date of purchase

Applications

Innovative Technology
For Human Life

Air@-EL100 is a solution for wireless communication, and the most economical system for elevator CCTV in the market.

Wireless Solution for Elevator



References

Air@-EL100 is a new product which was released in 2011. Air@-EL100 has the same video quality as Air@-EL300, laser optical video transmission system for elevator CCTV. Since 2006, thousands of Air@-EL300 units have been installed for elevators at high rise corporate buildings and apartments in Korea. Iconic buildings in the world have adopted Air@-EL300s in their elevator CCTVs, and major Korean elevator companies have installed the products, too.

High rise Buildings

- Wynn Las Vegas Casino Hotel, US
- New York Housing Authority, US
- Peninsular Hotel, Hong Kong
- ITV Studio in London, UK
- Shangri-La Hotel Sydney, Australia
- RCBC Plaza in Manila, Philippines
- Samsung Life Insurance Seocho Headquarter, Korea
- Samsung Group Namdamoon Headquarter, Korea
- LG Display Building, Korea
- Many Corporate Buildings in Korea

High rise Apartments in Korea

- Samsung Apartment
- Hyundai I Park Apartment
- GS Xi Apartment
- Doosan Apartment
- Woosung Apartment
- Sambu Apartment
- Kumho Richensia

Major elevator Companies based in Korea

- ThyssenKrupp Elevator Korea
- Hyundai Elevator
- Otis Elevator Korea



Wynn Las Vegas Casino Hotel,
US



RCBC Plaza in Manila,
Philippines



Peninsular Hotel,
Hong Kong



Samsung Life Insurance
Headquarter Building, Korea



LG Display Building,
Korea



Hyundai I park Apartment,
Korea

** All of above references are Air@-EL300, not Air@-EL100.

Technical Specifications Air@-EL100



Size and Weight

- Height : 5.5inches (140mm)
- Depth : 3.9inches (100mm)
- Width : 3.9inches (100mm)
- Weight : Transmitter 0.55lb (250g)
Receiver 0.57lb (257g)



In the Box



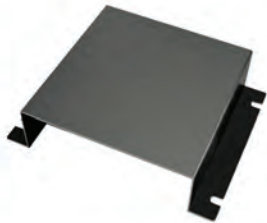
Transmitter



Receiver



Power Adapters



Bracket for Receiver

Electrical and Optical Data

Data Format	I/O Signal Video Format	NTSC or PAL Composite CVBS Max 1Vp-p, 75 ohm
Transmitter	Bit Error Rate LED Wavelength Out Power Diameter	<10 ⁻⁹ 630 nm 5000mcd 50mm
Receiver	Detector Diameter Gain	Silicon Pin PD 50mm > -33dBm
Power Supply	Input Output	AC100~240V(50~60Hz) DC12V, 1A
Operating Temperature		-4 ~ 158 °F (-20 ~ 70°C)

** Shape or specifications are subject to change without any notice to improve the quality of product.

Our Partner :

Technical Specifications Air@-EL300

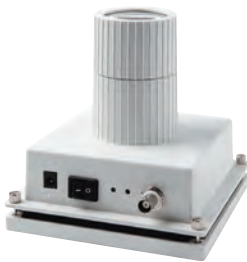
Complies with FDA performance standards 1040.10 for laser products.

Size and Weight

- Height : 5.6inches (143mm)
- Depth : 5.5inches (140mm)
- Width : 5.5inches (140mm)
- Weight : Transmitter 0.96lb (435g)
Receiver 0.96lb (435g)



In the Box



Transmitter



Receiver



Power Adapters



Bracket for Receiver

Electrical and Optical Data

Input Data	Video Format	NTSC or PAL Composite CVBS Max 2Vp-p, 75ohm
Transmitter	Bit Error Rate Light Source Laser Wavelength Output Power Diameter Beam Divergence	<10 ⁻⁹ InGaAlP Laser Diode 658 nm 30mW 50mm 18mrad
Receiver	Detector Diameter Gain	Si APD 50mm > -45dBm
Connection	Signal	BNC Connector
Power Supply	Input Output	AC100~240V(50~60Hz) DC12V, 1A
Operating Temperature		-4 ~ 158 °F (-20 ~ 70°C)

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