



2-WIRE² APARTMENT INTERCOM SOLUTION

Zero Rewiring | Plug & Play | Full IP Experience



www.dnake-global.com

DNAKE 2-Wire Apartment Intercom Solution

Modern Experience without Rewiring



Easy & Smart Intercom Solutions

With over 21 years of experience, DNAKE specializes in the design and manufacture of innovative, high-quality smart intercom and home automation solutions. Operating a 50,000m technology park and supported by a team of more than 1,300 professionals—including over 330 R&D engineers—DNAKE serves as a trusted smart living solution provider for over 12.6 million families across 90+ countries.



reddot winner



FRENCH
DESIGN AWARD



50,000m²

Industrial Park

21 Years

IP Intercom Expertise

50,000+

Projects Delivered

12.6 Million+

Households Covered

DNAKE 2-WIRE APARTMENT INTERCOM SOLUTION

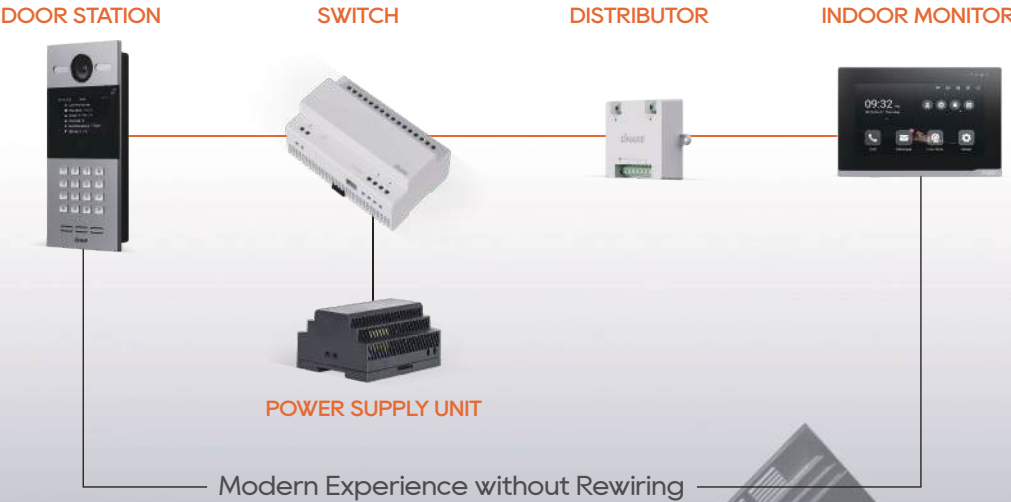
Turn Existing Buildings into Smart Properties

In Europe and other mature markets, retrofit projects for apartment intercom systems are often constrained by high installation costs and the complexity of rewiring.

DNAKE 2-Wire Intercom Solution for Apartment Retrofits provides a simpler way to upgrade to smart intercom systems via existing 2-wire infrastructure.



An efficient solution for apartment retrofit and residential deployment. By reusing existing 2-wire infrastructure, the system significantly reduces installation complexity and project cost while delivering modem IP-based intercom functionality.



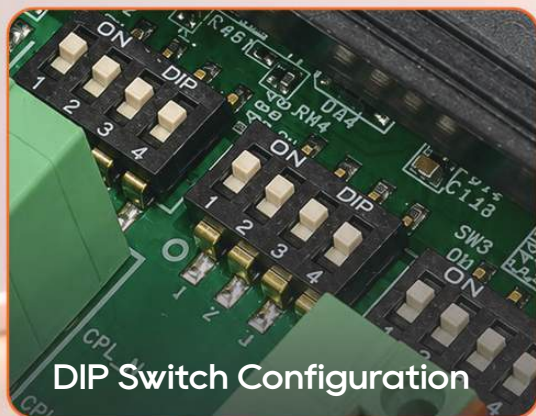
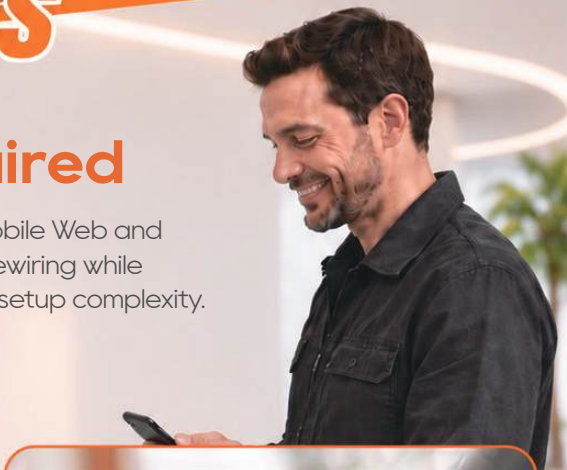


TRADITIONAL REWIRING

VS

No Rewiring Required

Reuses existing 2-wire infrastructure with Mobile Web and DIP Switch configuration, eliminating costly rewiring while reducing installation time, labor, and on-site setup complexity.



DIP Switch Configuration



Mobile Web Configuration



Seamless Access Experience

Multiple access methods for secure and convenient entry.



Stable Performance

Compatible with different wire gauges and materials, ensuring stable system operation in various environments.

Cloud Service

Hosted in the cloud, accessed remotely



CMS

Deployed on-premises, managed locally.



Intelligent Intercom Experience

Supports Cloud / CMS management and mobile access, with seamless integration into IP systems including elevator control, management stations, and IPC.

Flexible Deployment

Supports various topologies and adapts to diverse scenarios, from detached apartment buildings to large residential communities.



Low-Rise Apartments



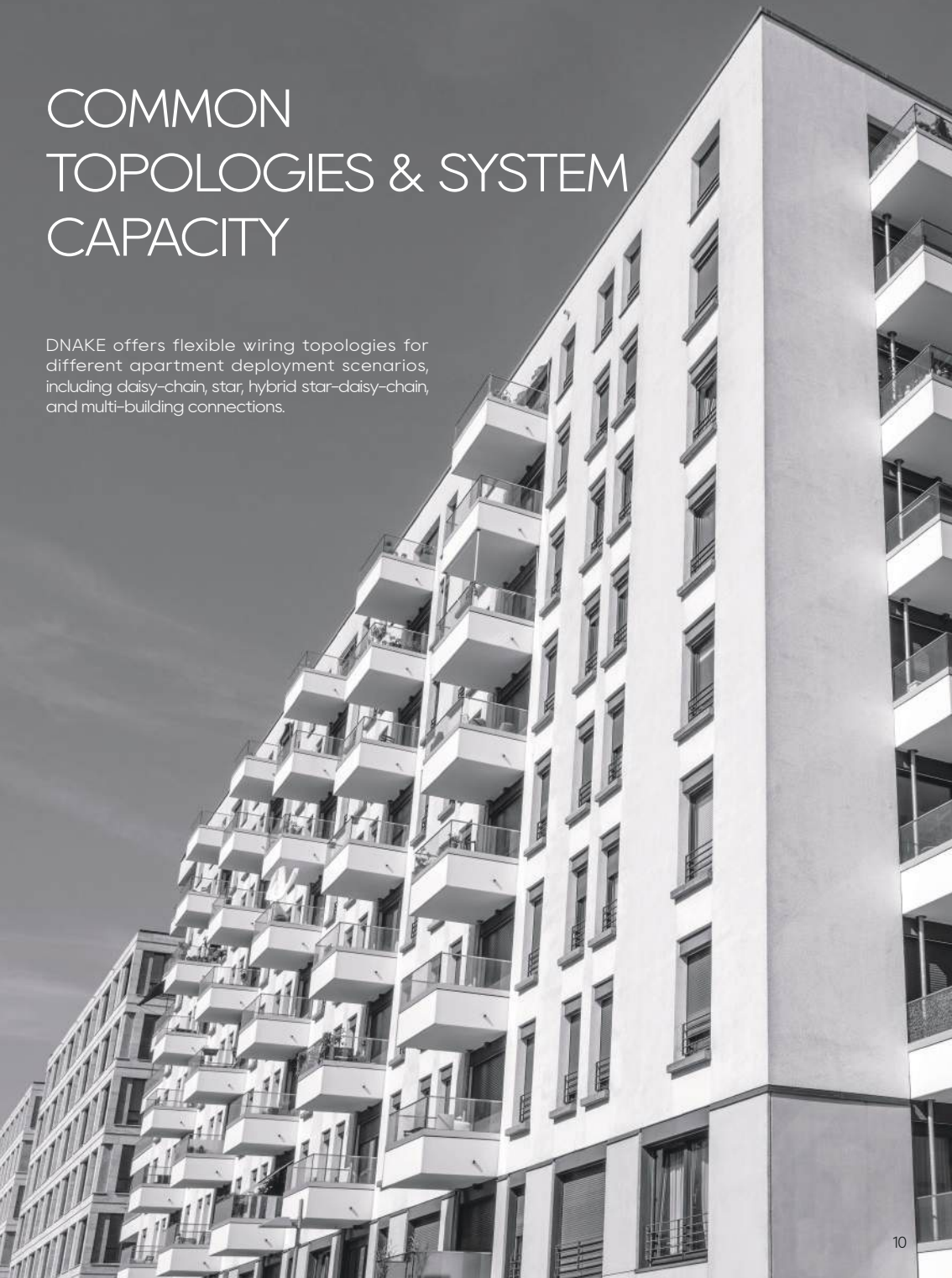
High-Rise Apartments



Large Residential Communities

COMMON TOPOLOGIES & SYSTEM CAPACITY

DNAKE offers flexible wiring topologies for different apartment deployment scenarios, including daisy-chain, star, hybrid star-daisy-chain, and multi-building connections.



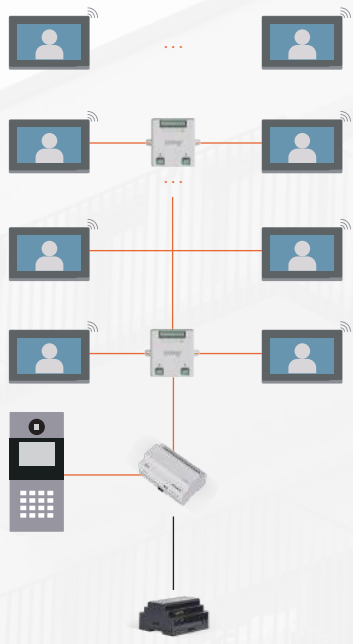
Single Building

Scenario-Single Apartment(≤ 32 Apartments)

One Power Supply can Support 32 WiFi Indoor Monitors or 35 non-WiFi Indoor Monitors

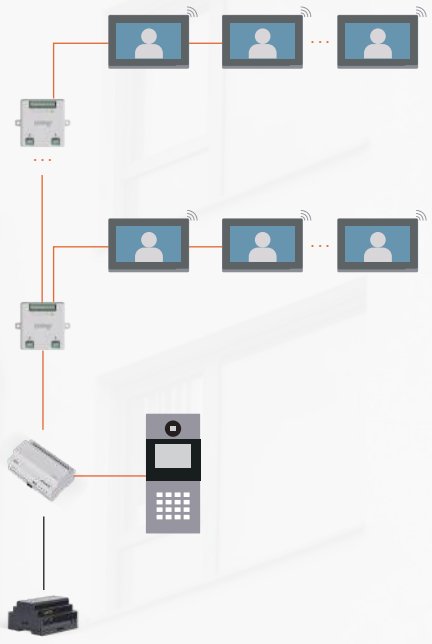
Star Topology

For each floor, the system supports connection of max. 4 main indoor monitors from 4 ports of the distributor.



Daisy-Chain Topology

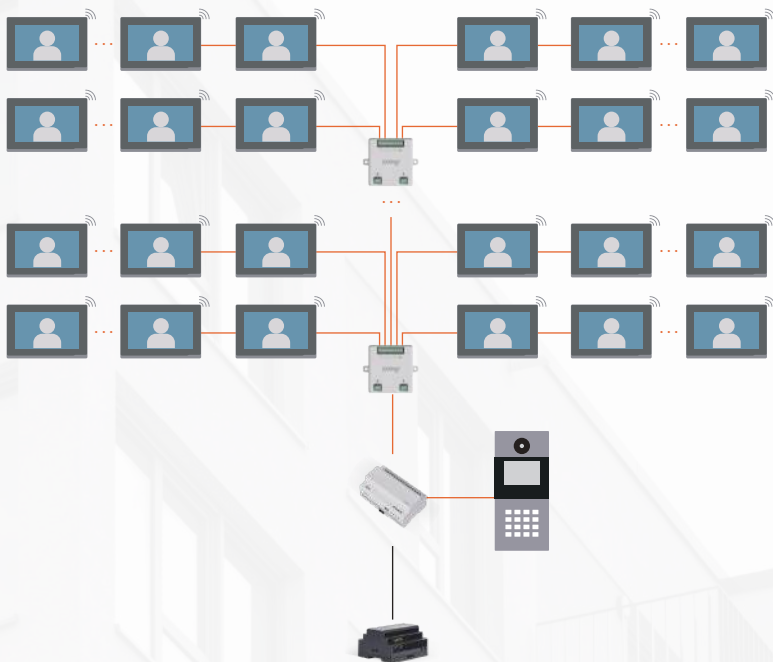
For each floor, the system supports connection of max. 8 indoor monitors via one port of the distributor.



— 2-Wire Cable
— Power Cable

Hybrid Star & Daisy-Chain Topology

For each floor, the system supports connection of max. 16 main indoor monitors from 4 ports of the distributor.

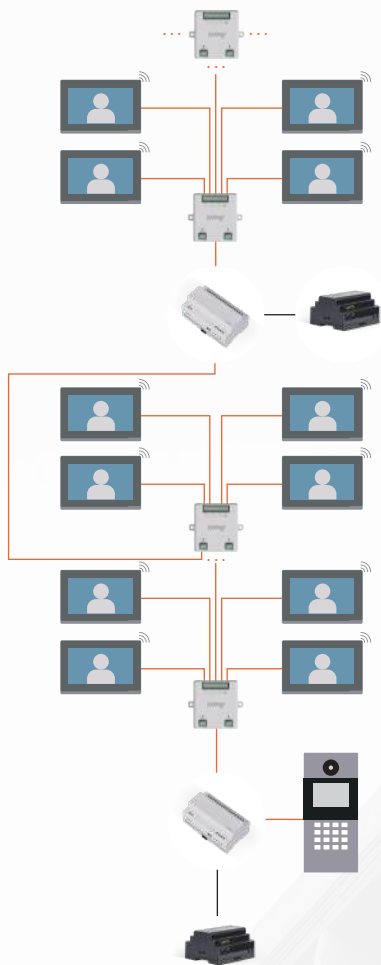


Single Building

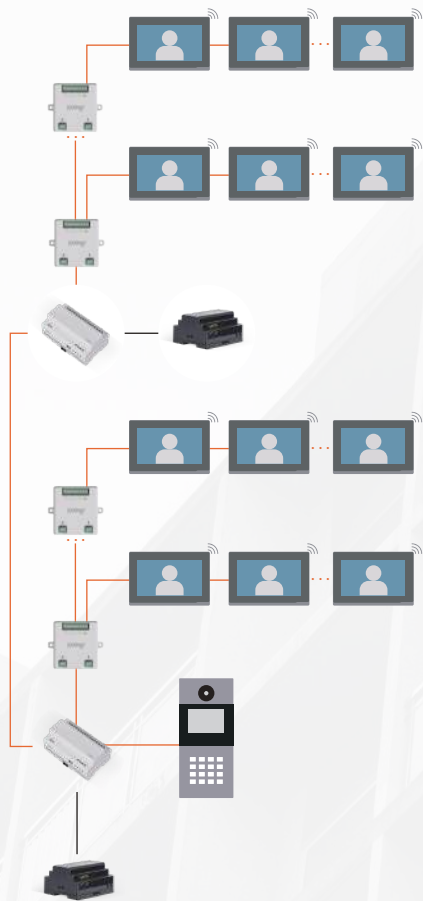
Multiple Power Supplies (>32 Apartments)

Supports larger apartment deployments with additional power supplies and switch-based expansion.

Star Connection Extension Topology



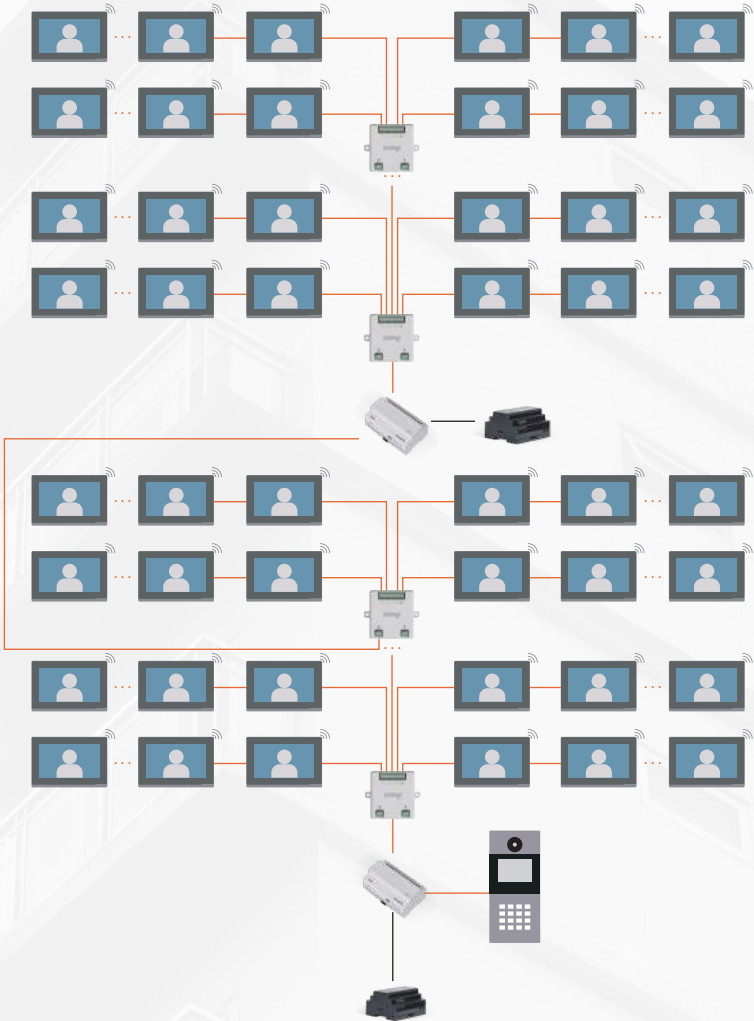
Daisy Chain Connection Extension Topology



Scenario-Single Apartment(> 32 Apartments)

— 2-Wire Cable
— Power Cable

Star & Daisy Chain Connection Extension Topology



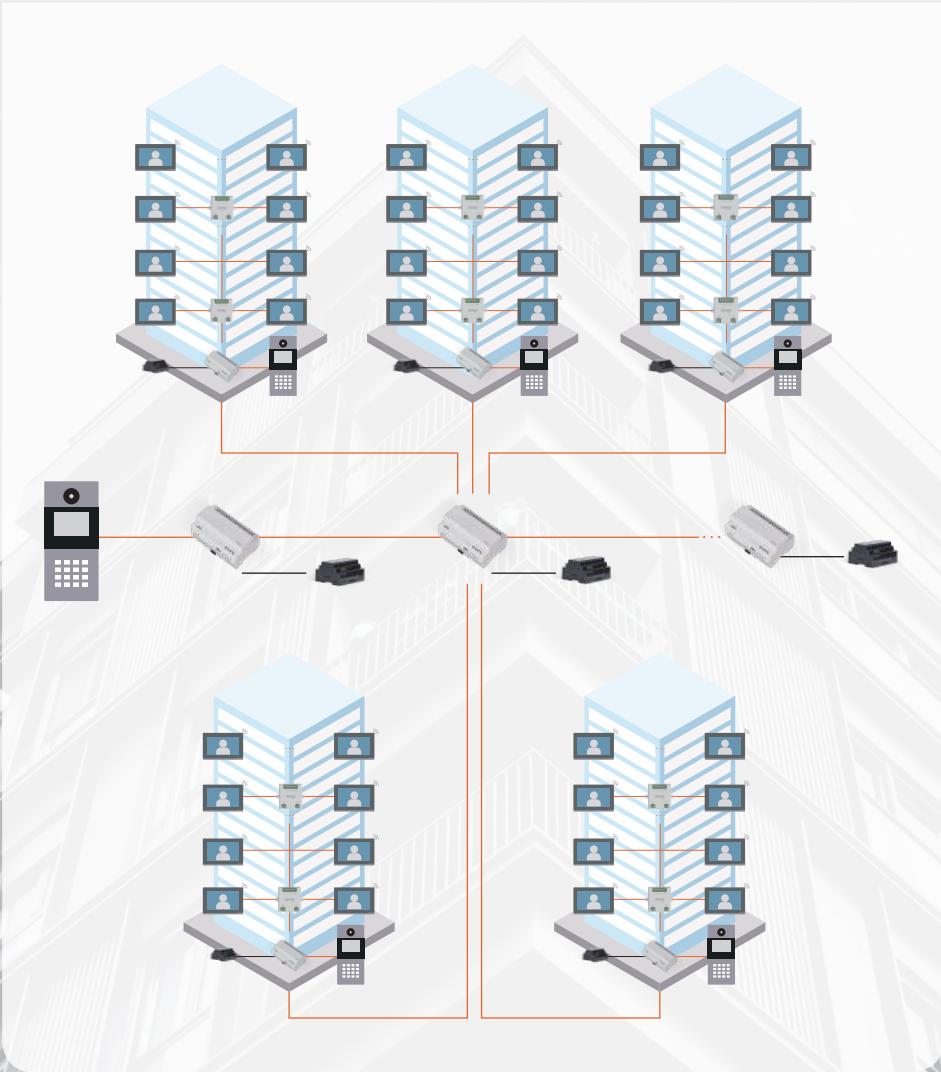
Multiple Buildings

Flexible Topology for Large Residential Deployments

- Max. 15 buildings can be connected in the same system via TWD02

Scenario – Multiple Apartments

— 2-Wire Cable
— Power Cable

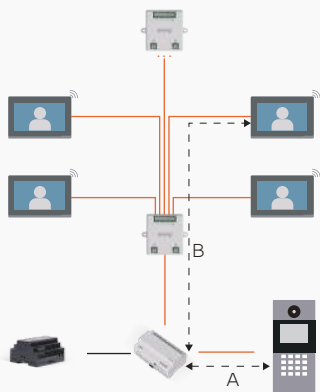


2-WIRE

System Distance Table

Star Connection

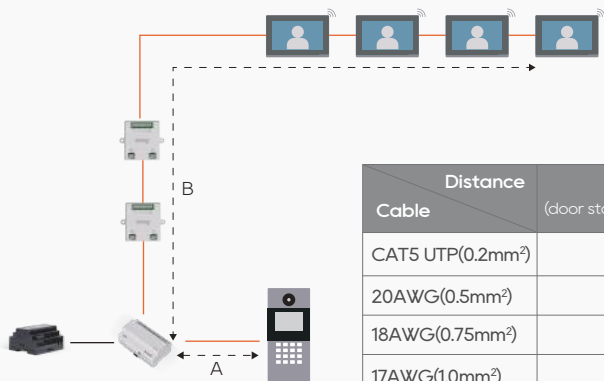
1 power supply supports 1 door station + 32 Wi-Fi indoor monitors / 35 non-Wi-Fi indoor monitors



Distance Cable	A (door station to TWD02)	B (TWD02 to the farthest indoor monitor)
CAT5 UTP(0.2mm ²)	40m	60m
20AWG(0.5mm ²)	50m	90m
18AWG(0.75mm ²)	80m	90m
17AWG(1.0mm ²)	120m	90m

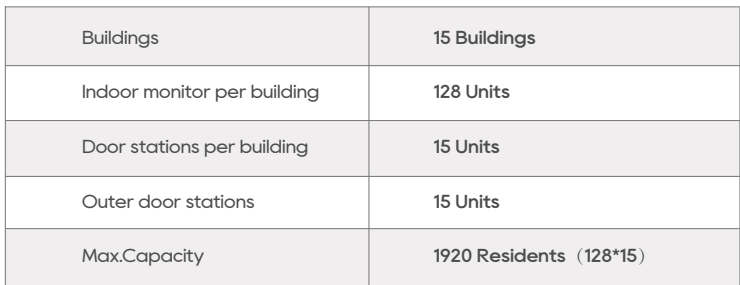
Daisy Chain Connection

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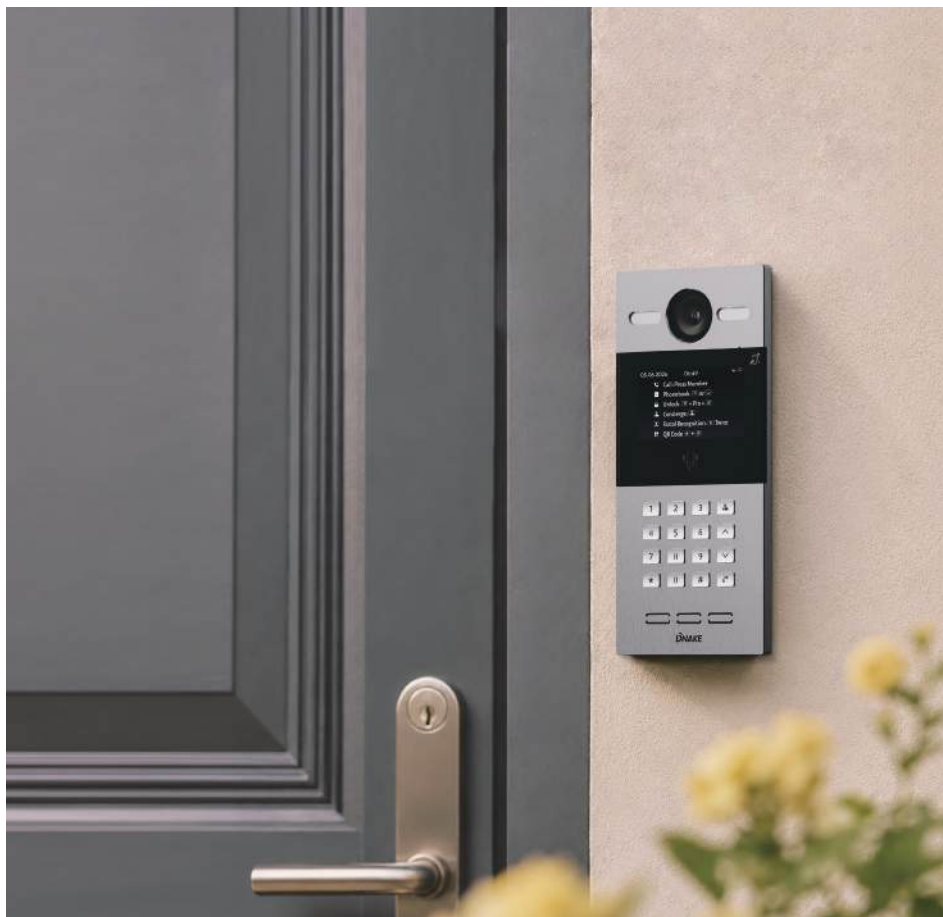
Note: The maximum distance from each building to the central switch is 150 meters.



PRODUCT SHOWCASE

Door Station	Indoor Monitor	Switch	Distributor	Power Supply Unit
				





S405

2-Wire 4.3" Android Door Station

- 4.3" color TFT LCD
- 2-wire BUS powered
- 120° 2MP HD camera with WDR
- Lock control: 2 Relay out + 1 electronic lock
- Door entry: Call, Face, IC/ID card, PIN, APP, QR code
- Secured access with MIFARE Plus SL1/SL3 card
- DIP Switch & Mobile WEB configuration
- Accessibility: induction loop & braille dot
- Tamper alarm



S103M-5

2-Wire Multi-button Door Station

- 5 call buttons with nameplates
- 2-wire BUS powered
- 110° 2MP HD camera with auto lighting
- Lock control: 1 Relay out + 1 electronic lock
- Door entry: Call, IC card, APP, QR code
- Expandable with optional 10-button call module
- DIP Switch & Mobile WEB configuration
- Tamper alarm



S103K

2-Wire Door Station with Keypad

- 2-wire BUS powered
- 110° 2MP HD camera with auto lighting
- Lock control: 1 Relay out + 1 electronic lock
- Door entry: Call, IC card, PIN, APP, QR code
- Expandable with optional nameplate module
- DIP Switch & Mobile WEB configuration
- Tamper alarm



E307W

2-Wire 7" Indoor Monitor

- 7" capacitive touch screen, 1024 x 600
- 2-wire BUS or optional 12V DC powered
- Wi-Fi supported
- HD audio & video communication
- CCTV integration
- TF card supported
- Quick & simple setup



TWD03



TWD02



HDR-150-48



TWD02

2-Wire Switch

- CH1-CH8: Deliver power & data to TWD03 / door stations / indoor monitors over 2 wires
- Daisy chain for multi-building expansion
- Connection to PoE switch for cloud access
- Easy maintenance with reset button
- DIN rail installation



TWD03

2-Wire Distributor

- CH1-CH4: Deliver power & data to indoor monitors over 2-wire connection
- Connects to TWD02 or cascades from another distributor
- DIN rail installation



HDR-150-48

Power Supply Unit

- Power for 2-Wire System
- LED power indicator
- Stable operation
- DIN rail installation

Project References



50,000+
Project Completed



12,000,000+
Households Covered



NITERÓI 128
Bogotá, Colombia | Apartment



HORIZON
Pattaya, Thailand | Detached Homes



Oaza Mokotow
Warsaw, Poland | Apartment



MedPark Hospital
Bangkok, Thailand | Hospital



Projekat P 33
Belgrade, Serbia | Apartment



SKY HOUSE ALAM SUTERA & BSD
Banten, Indonesia | Apartment



CEPA KONUTLARI PROJESİ
Ankara, Turkey | Apartment



Majorelle Residences
Rabat, Morocco | Apartment



DARCO Signature
Jeddah, Saudi Arabia | Apartment



TOWER 11 PEARL
Doha, Qatar | Apartment



Raheja Residency
Mumbai, India | Luxury Residence



MANDALA GARDEN TOWN
Ulaanbaatar, Mongolia | Apartment



KOLEJ NA 19
Warsaw, Poland | Apartment



Soyak Olimpiakent
Istanbul, Turkey | Apartment



Smart Concept Project
Ashgabat, Turkmenistan | Apartment



Al Erkyah City
Doha, Qatar | Apartment



Rasiyat Al-Manar Project
Jeddah, Saudi Arabia | Apartment



DARCO Signature
Jeddah, Saudi Arabia | Apartment



www.dnake-global.com



+86 592-5705812



sales01@dnake.com