# Light ODN Solution Highlights

## Building Intelligent Optical Networks

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# ZTE Light ODN Solution

**1**

## Gigabit Networks Have Higher Requirements for Intelligent ODN

### Ineffective management of ODN resources

- Inaccurate data
- Unclear performance
- Late maintenance

### Optical network data unable to be provided in real time

- Device location
- Connection ID
- Real-time routing

### Effective & intelligent presentation of network resources

- Accurate resource data
- Accurate routing
- Accurate fault location

**Visible**

**Manageable**

**Controllable**

中国移动 China Mobile — Digital intelligent cloud network

Claro — Shorten TTM, easy OAM

orange — High security and reliability

**2**

## Rapidly Builds Visualized and Manageable Intelligent ODN

### Lightweight Construction

• **Fast construction**
- ✓ Flexible adaptation to various application scenarios
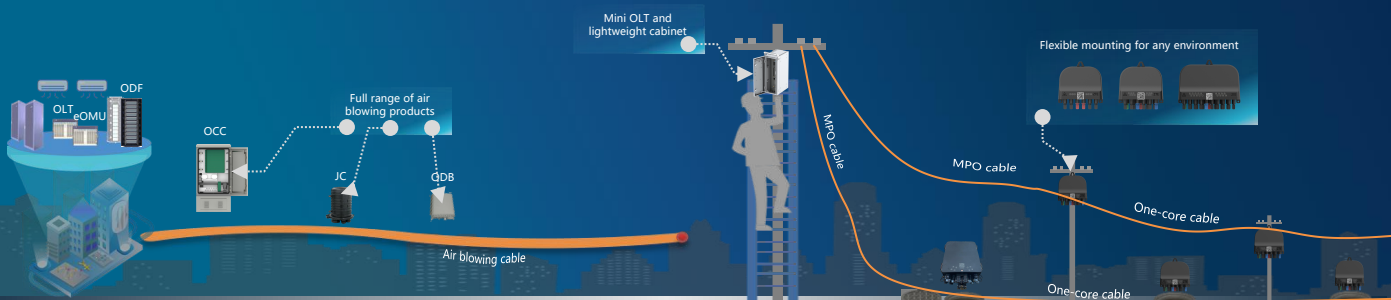- ✓ **Splicing-free** to save labor costs

• **Visual management**
- ✓ **Visualized** ODN topology
- ✓ Visualized the detailed ODN information

### Lighting up ODN
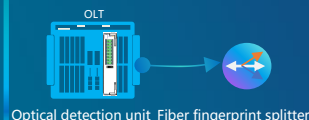
• **Intelligent O&M**
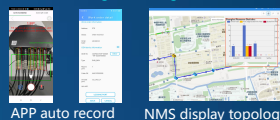- ✓ Early warning, **proactive O&M**
- ✓ Unified platform, precise troubleshooting

Mini OLT and lightweight cabinet

Flexible mounting for any environment

ODF

OLT eOMU

OCC

Full range of air blowing products

JC

QDB

Air blowing cable

MPO cable

MPO cable

One-core cable

One-core cable

Saving **50%** installation time
- Blind insertion
- Cabinet
- Skilled **30%+** Unskilled Labor cost

ODN Topology presentation
- OLT
- Optical detection unit  Fiber fingerprint splitter

Intelligent management
- APP auto record
- NMS display topology

Air-blowing series products
- FDH
- Optical panel
- Micro duct

2

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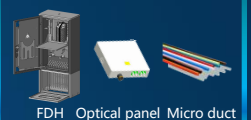
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**3** Full Series of Air Blowing Products Helps Efficiently Deploy ODN

CO

4way air blowing cable(12/10mm)

FDH

Connector

12way air blowing cable (12/10mm)

FDH

D50(24- 5/3.5mm) type bundle duct

Air blowing FDH/JC

FAT

T Type Closure

JC (Option)

Y Type closure

FAT

**Multi-storey building**

OP

Villa

JC (Option)

**High-rise buildings**

**Air-blowing series products**

| FDH | Joint closure | FAT | Optical panel | Micro duct | 4way 7/3.5mm Bundle duct |
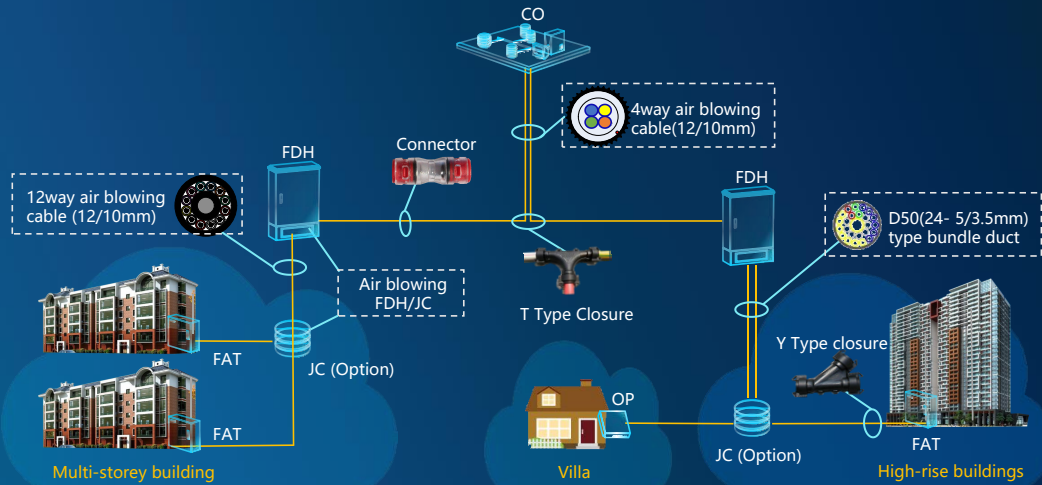
**4** Continuous Evolution of Light ODN Products to Save Costs

**1**

Indoor

Outdoor

V1.0 Pass through duct    V2.0 Pass through duct

**V1.0 -> V2.0 evolution**

**2**

V1.0    V2.0

**28%** Smaller than industry general size

**3**

Reduced diameter to 13mm

**Customer benefits**

**1** Saving space

**10%+**

**30%**

Space rental    Space saving

**2** Normalization in multiple scenarios

Aeria

Duct

One type

**3** Easy installation

**Self-lock**

Prevent connectors accidental loosening to ensure network reliability

**4** Compatible with V1.0

V2.0 Connector +Converter -> V1.0 box

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**5**

## Light ODN Solution Builds Visualized and Manageable Intelligent ODN



**APP**

Intelligent identification and resource record

Work order management

**NMS**

Network Architecture

GIS MAP

Basic Information

Port Status

Port Usage

Platform

Image recognition

OLT — ODN — ONT
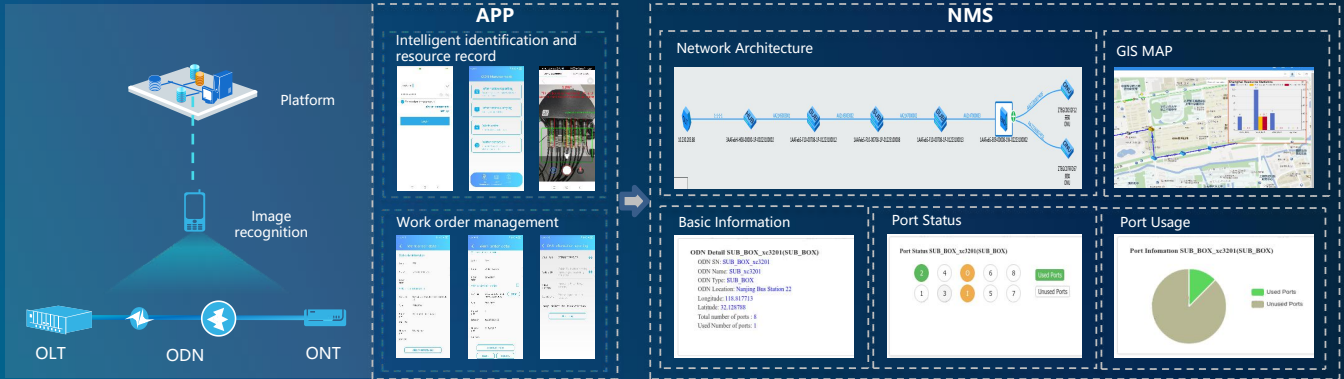
### A Accurate Resource
- **100%** Resources accuracy
- **0** Resource waste to protection investment

### B Closed Process
- **AI image recognition** and collection
- Automatic data upload
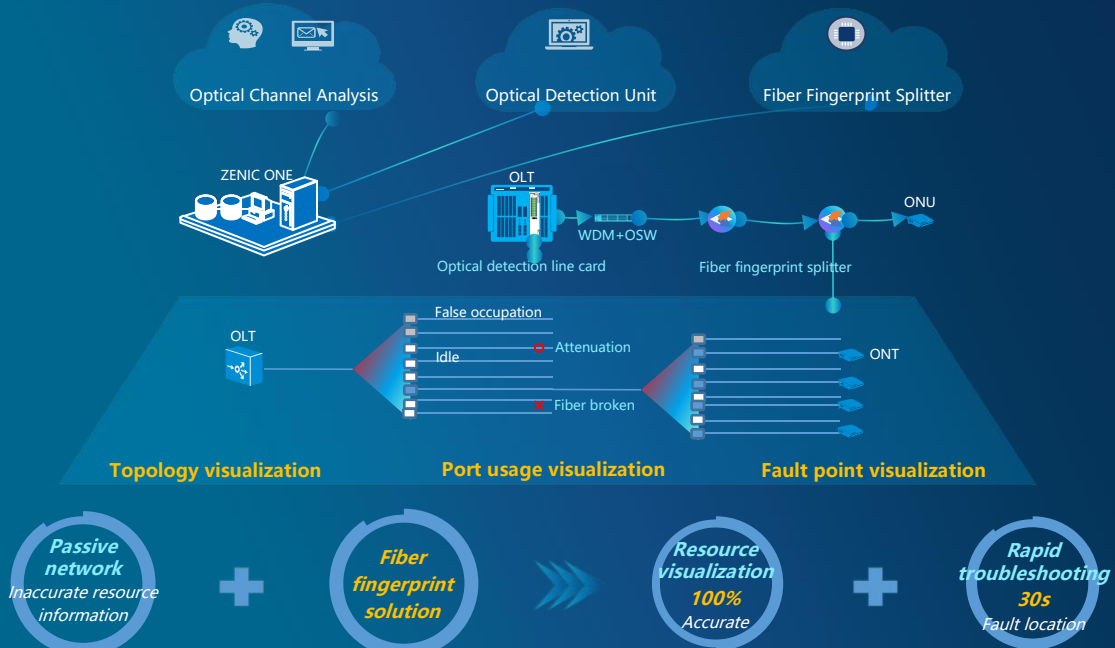- Avoid manual error and limitation

### C Efficient O&M
- Resources **visual display** to guide O&M
- Resource optimization policies generation

**6**

## Visualized Optical Network to Improve O&M Efficiency



Optical Channel Analysis · Optical Detection Unit · Fiber Fingerprint Splitter

ZENIC ONE · OLT · WDM+OSW · Fiber fingerprint splitter · ONU

Optical detection line card

OLT — False occupation / Idle / Attenuation / Fiber broken — ONT

**Topology visualization** · **Port usage visualization** · **Fault point visualization**

*Passive network* Inaccurate resource information **+** *Fiber fingerprint solution* ≫ *Resource visualization* **100%** Accurate **+** *Rapid troubleshooting* **30s** Fault location

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# ZTE Light ODN Solution

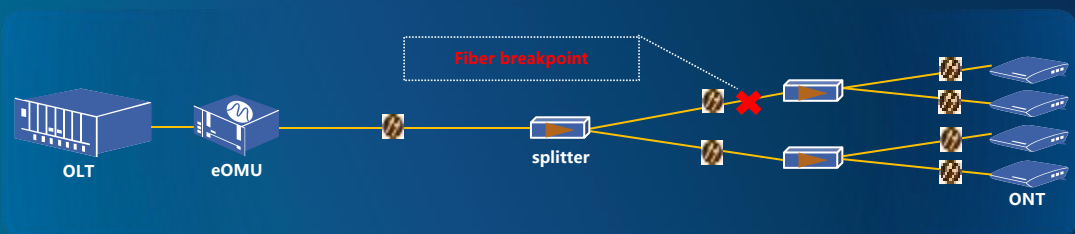## The 'Eagle Eye' for Optical Network Monitoring

**1** **Solving the Challenges in the Acceptance of Optical Network Construction**

◉ Subsection acceptance     ◉ End-to-end acceptance     ◉ Flexible and efficient
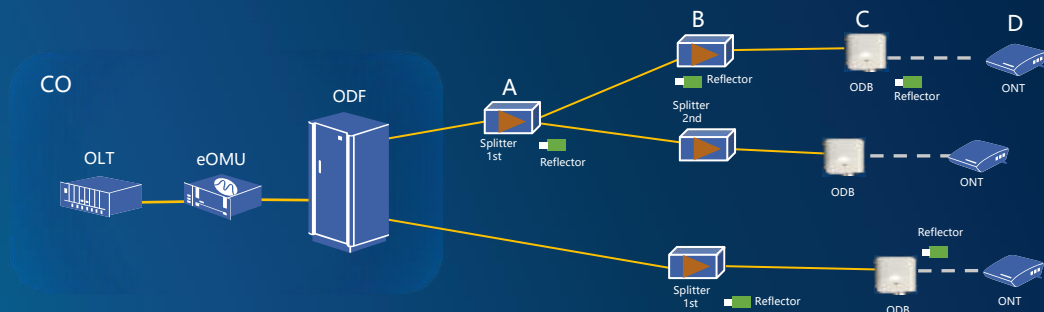


**2** **7*24 Fiber Network Monitoring Visualizes Passive Network Resources**

📞 Real-time     📷 Centralized     💡 Automatic



**3** **Proactive Operation and Maintenance**

◆ Making passive fiber resources manageable

    ✓ Health data storage, query and comparison

    ✓ Intelligent analysis

**10 Seconds + 1 Meter**
Fault location

◆ Multiple test policies improve performance

    ✓ Alarm trigger test
    ✓ Polling test

# Light ODN Solution Highlights

## Leading 5G Innovations

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