



### 2. DISTRIBUTION

The distribution network serves as the critical link between feeder networks and last-mile connections, ensuring seamless broadband delivery to communities. To meet increasing bandwidth demands, service providers require infrastructure that is flexible, cost-effective, and future-ready. Microduct solutions have become the preferred choice for distribution networks due to several key advantages:



# HOW MICRODUCTS PROVIDE UNIQUE BENEFITS FOR DISTRIBUTION NETOWORKS?

### **Multi-Size Ducts for Varied Demands**

Unlike feeder networks that rely on uniform large ducts, distribution networks require a mix of duct sizes. Microducts allow providers to deploy multiple tube sizes in a single run, simplifying installation.

#### Reduced Wasted Fiber & Investment

Feeder networks must install large fiber bundles upfront to meet long-term needs. Distribution networks can expand fiber incrementally, deploying ducts without immediately filling them, reducing CAPEX and OPEX costs.

### Optimized for Aerial & Pole-Mounted Deployments

Distribution networks often require aerial solutions in rural or hard-to-reach areas. Microducts are lightweight, flexible, and easy to install on utility poles, providing a faster and more cost-effective alternative to underground fiber.





# HOW MICRODUCTS PROVIDE UNIQUE BENEFITS FOR DISTRIBUTION NETOWORKS?

### **Easier Last-Mile Integration**

Microducts seamlessly connect distribution hubs to last-mile FTTH deployments. Service providers can pre-install ducts for future fiber needs, ensuring quick and hassle-free customer connections without major infrastructure upgrades.

### **Enhanced Network Resilience**

Distribution networks serve multiple neighborhoods, businesses, and rural areas —a fiber failure here affects multiple users.

Microduct solutions minimize splice points, protect cables against damage, and ensure fast fiber replacements, reducing downtime.

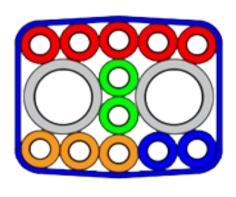


### VARIOUS MICRODUCT CONFIGURATION CHOICES

For flexible distribution network depending on subscribers' request with minimal time and installation: . For these purposes, the small size of Microtube has been widely deployed for the distribution network

7/3.5, 7/4mm, 8/5mm





#### **Combined Duct**

Network owners can enjoy access to build networks easily and efficiently not only saving the cost to use combined duct of one pathway.

Distribution and drop network will be built at the same time using 14/10mm and 7/3.5mm duct mixed









Microduct Branch Unit closure







Why Microducts Are a Game-Changer?
Microducts offer flexibility, cost-efficiency, and modular expansion, reducing upfront investment. They support aerial, underground, and pole-mounted deployment, optimize last-mile and FTTH growth, and enable hybrid configurations for seamless distribution and drop connections.



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