

## The enhanced mini FDH 3000 fiber distribution hub and integrated splitter cabinet

Inventive fiber distribution solutions tailored to your evolving needs



Today's information networks are growing and changing at astonishing rates. It's estimated that, by 2021, a million minutes of video content will cross networks every second.<sup>1</sup> Smarter household appliances will become mainstream, technology utilizing sensor connectivity will continue to increase, data applications will grow, and the Internet of Things (IoT) will require even more bandwidth. This growth is fueling household bandwidth usage that is forecast to increase by 30 percent every year.<sup>2</sup> In fact, it's projected that some 27 billion devices will be connected to IP networks by 2021—more than three devices for every person on the planet.<sup>3</sup>

#### HOUSEHOLD BANDWIDTH





To keep pace, service providers need solutions that unlock the potential of their networks—providing maximum flexibility while maintaining scalability, agility, and reliability.

## Deployment challenges ahead

In the race to deliver higher value services and acquire new subscribers, providers face many connectivity challenges when expanding, repairing, or linking new customers to their networks. At the center of this connectivity is the fiber distribution hub, or FDH. This neighborhood-based centralized hub houses vital components that distribute the optical signal from the central office to subscribers. The FDH is key to making connections quickly and efficiently, and overcoming network challenges.

- **Scalability**—Building an infrastructure that can scale up efficiently to add new subscribers is crucial. And, since expansion can be impacted by complex government permit and zoning requirements, the size of new equipment and the ease of installing it are important considerations.
- **Agility**—Your network must respond quickly to market demands. In today's increasingly urbanized landscape, smallerfootprint equipment can greatly speed project rollouts. To put it another way, "How technician-friendly is this equipment?"
- **Reliability**—To meet ever-increasing customer expectations and reduce service rollouts, your new components must withstand the test of time.

<sup>1</sup> The Zettabyte Era: Trends and Analysis http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html <sup>2</sup> ACG Research, "Forecast of Residential Fixed Broadband and Subscription Video Requirements," 2014

<sup>3</sup> Cisco VNI Global IP Traffic Forecast, 2015–2020 http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html

## Expect more from your mini

CommScope's enhanced mini FDH 3000 is a flexible and cost-effective way for any size provider to expand their FTTX network. Part of a versatile portfolio of fiber distribution hub cabinets, the enhanced mini FDH 3000 can now be deployed indoors or outdoors.



#### A scalable platform

Built to serve the distinct needs of increasingly diverse markets and customer segments, scalability is designed into the enhanced mini FDH 3000. Its unique architecture ensures rapid connections, so, whether providers need to make new connections or expand existing ones, the mini is ready. The new version of this industry-standard fiber distribution hub includes plug-and-play splitter modules, parking lot fiber storage, and a technician-friendly cabinet that's both easy to install and easy to access for network changes.

- · Up to 96 distribution fibers
- $\cdot$   $\,$  From four to as many as eight splitters
- · An increased number of pass-throughs

#### Many options = network agility

The enhanced mini FDH 3000 is designed for quick infrastructure responses to changing market demands. To offer more connections, the mini is now six inches taller, but retains the smallest form-factor in the industry—its narrow profile is only nine inches deep.

- $\cdot$  Can be equipped with 100-foot stubs for additional flexibility
- · Multiple mounting options: ground, pole, and wall
- Breakout cable assemblies can be preterminated HMFOCs (Hardened Multi-Fiber Optic Connectors) for distribution to customer premises, significantly decreasing the amount of time technicians spend making connections



#### Mini FDH—maximum efficiency increase

At CommScope, we're invested in helping our customers be ready for what's next. We built the enhanced mini FDH 3000 on the foundation of four time-tested elements: bend radius protection, intuitive cable routing, easy fiber and connector access, and physical protection. All of these significantly impact the reliability, flexibility, and operational costs of fiber networks, both today and in the future. Let our track record of problem solving and world-class engineering help unlock your network's potential.

#### Industry expert praises outdoor and indoor flexibility

"The right size and density, the mini FDH 3000 can be used in a mix of lower-density urban environments, higher-density residential areas and businesses and also indoor, as the building entry box. For this reason, we see the enhanced mini FDH 3000 becoming the preferred box for service providers."

# Features, benefits, specifications

- · For indoor and outdoor applications
- Supports up to 96 distribution ports, plus 24 pass-through ports
- · Accommodates as many as eight splitters
- · Maximum feeder fibers—36
- Can be equipped with 100-foot cable stub lengths
- Allows use of hardened connectors (HMFOC)
- Integrated splicing or MPO interface for F1 and F2 fibers
- · Carefully designed fiber paths reduce attenuation and signal loss
- · Single front door access
- Swing frame access to splitter chassis, splice trays, and MPO adapters\*
- · Parking lot storage for 32 fibers
- $\cdot$  Access via sliding adapter packs
- Miniaturized cabinet takes up less space at only 23" in high x 13" wide x 8" deep with universal bracket included for wall or pole mounting
- Weather-resistant metallic cabinet protects from dust, moisture and UV with operating temperature range: -40°C to 65°C (-40°F to 150°F)
- · UL safety listed
- \* Only fibers 1-8 are used in MPO feeder configuration





Swing frame and routing

## Ordering information



R Indoor ribbon for cable stub

### Accessories

- · Cable compression fitting/clamp kit
- · 216 Tools—can wrench keys
- $\cdot$  Cleaning kits and touch-up paint

## Plug-and-play splitter modules

- Standardized splitter modules for all FDH cabinet sizes
- Easy to insert and remove without affecting adjacent splitters
- · Common output length
- Bend-optimized fiber ruggedized for extreme temperatures—from -55°C to 85°C
- Reversible dust cap allows pass-through of up to two fibers per splitter slot
- Superior loss performance at 1490 nm and 1550 nm wavelengths
- Wideband pass 1260-1635 nm to ensure optical performances for all applications



| Splitter type | Max loss* | Typical loss* | Uniformity | Return loss | Directivity | PDL   | Wavelength range             |
|---------------|-----------|---------------|------------|-------------|-------------|-------|------------------------------|
| 1x2           | 3.8dB     | 3.8dB         | 3.8dB      | ≥55dB       | ≥55dB       | 0.2dB | 1260-1360nm and 1480-1580 nm |
| 1x4           | 7.2dB     | 3.8dB         | 3.8dB      | ≥55dB       | ≥60dB       | 0.2dB | 1260-1635nm                  |
| 1x8           | 10.3dB    | 3.8dB         | 3.8dB      | ≥55dB       | ≥60dB       | 0.2dB | 1260-1635nm                  |
| 1x16          | 13.5dB    | 3.8dB         | 3.8dB      | ≥55dB       | ≥60dB       | 0.3dB | 1260-1635nm                  |
| 1x32          | 16.7dB    | 3.8dB         | 3.8dB      | ≥55dB       | ≥60dB       | 0.3dB | 1260-1635nm                  |

\* Includes Polorization Dependent Loss (PDL).

If you have design, installation, or troubleshooting questions, find prompt, expert support from a CommScope professional.

SUPPORT CENTER

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. As a communications infrastructure leader, we shape the always-on networks of tomorrow. For more than 40 years, our global team of greater than 20,000 employees, innovators and technologists has empowered customers in all regions of the world to anticipate what's next and push the boundaries of what's possible. Discover more at commscope.com



#### commscope.com

Visit our website or contact your local CommScope representative for more information.

#### © 2017 CommScope, Inc. All rights reserved.

All trademarks identified by (a) or TM are registered trademarks or trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services. CommScope is committed to the highest standards of business integrity and environmental sustainability with a number of CommScope's facilities across the globe certified in accordance with international standards, including ISO 9001, TL 9000, and ISO 14001. Further information regarding CommScope's commitment can be found at www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability.