

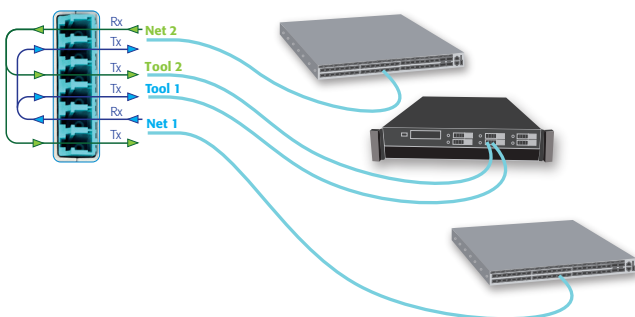


The **Tower Tap™** family is a 4th generation of passive Network Taps, designed with performance, scalability and quality in mind. The **Tower Tap™** family provides an identical copy of the network traffic for security, monitoring and recording tools. **Tower Tap™** Network Taps enable network infrastructure engineers to deploy decoupled, secure and failsafe test access points across their network quickly, easily and with minimal installation disruption. The high density design of the **Tower Tap™** family supports up to 240 Network Taps in a 1RU (19" x 1.75") space, dramatically reducing the overall rack space footprint of traditional access methods. Modern data center design architecture utilises the **Tower Tap™** family as a demarcation point to reduce the isolation time of performance failures in complex networks. This results in a major reduction in CAPEX and OPEX.

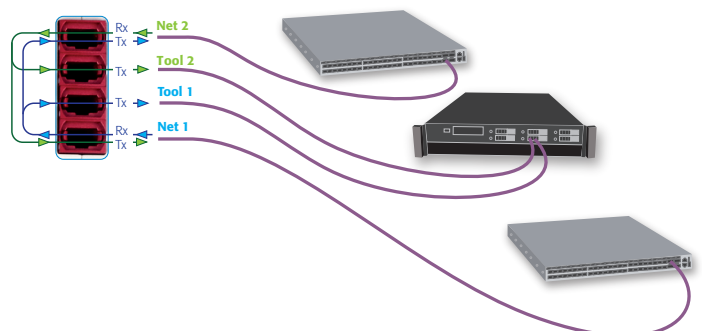
Tower Tap™ family exclusive advantages:

- Integrated Laser shutter for optical safety
- 'Push to Open' ejection mechanism, handle-free design supporting high density and improved fiber management
- 'Phase shift' insertion mode to ease the installation and operation of fibers in dense environments
- Robust module retention system in chassis for 'inserted', and 'phase shift' modes
- **Tower Chassis™** 1RU enclosure, with guiderails supporting efficient mix and match of all four module sizes
- MXC connector based modules, for high fiber density and data rate of up to 1.6Tb per connector
- Color coding scheme for ease of installation, operation and identification

Tower Tap LC™ Deployment



Tower Tap MTP™/MXC™ Deployment



Tower Tap™ Features:

Latency:

- Latency optimized splitters, 35-50% light propagation improvement over first generation taps

Performance:

- Low Insertion Loss splitters, high quality connectors and adapters

Quality:

- Tower Tap™ family utilizes the highest quality connectors, splitters and internal fibers to guarantee optimal in-service operation

Safety:

- Tower Tap LC™ and Tower Tap Dual LC™ can be equipped with an optional laser shutter for operator protection when not in use, and to eliminate datacenter clutter from discarded plugs
- Tower Chassis™ 1RU is a round edged enclosure for safe installation
- Teflon coated enclosure for power isolation

Density:

- 32 Tower Tap LC™ units in 1RU
- 20 Tower Tap MTP™ units in 1RU
- 20 Tower Tap MXC™ units in 1RU
- 16 Tower Tap Dual LC™ units in a 1RU
- The Tower Chassis™ supports any mix and match of the modules in any position
- The Tower Tap™ supports up to 240 Network Taps per 1RU space

Durability:

- The Tower Chassis™ is made of ruggedized hard coated anodized aluminum with Teflon coating protection
- The Tower Tap™ module is made of PC-ABS plastic from Bayer supporting harsh temperature environments

Ergonomic design:

- The design of both Tower Chassis™ and Tower Tap™ modules is comfort, functional, and user-friendly to allow easy installation and operation

Operation:

- Tower Tap™ modules utilizes a color coding scheme, identifying fiber modes and types for ease of in-service operation
- Tower Tap™ modules introduce a color coding scheme, supporting fiber modes and types
- Tower Cable™ introduces optional custom fiber connectors with pull-tabs, allowing easy fiber management in dense environments

Flexibility:

- Tower Tap™ provides the flexibility to mix and match different rates and types of modules in the same chassis

Scalability:

- Tower Tap™ scales from a single module up to 32 modules, and from a single Network Tap up to 240 Network Taps in 1RU space, covering data rates of 1G, 10G, 40G, and 100G

Protocol Agnostic:

- Tower Tap™ supports Ethernet, SONET, SDH, and ATM networks for both multi-mode and single-mode fiber links

Security:

- Un-powered, passive device
- No IP address
- Safe from remote attacks

Warranty:

- 7 Years hardware warranty



color coding scheme

OM1	OM2	OM3	OM4	PC/SPC/UPC	APC
MM				SM	

Tower Tap LC™



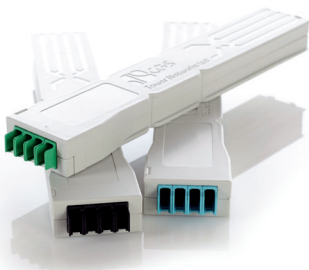
- **Multimode (MM):** 1G, 10G
- **Single mode(SM):** 1G, 10G, 40G, And 100G
- **2 x Simplex, or Duplex Taps**
- **Split Ratio:**
 - MM: 50:50, 60:40, 70:30, 80:20, 90:10
 - SM: 50:50, 70:30, 80:20, 90:10, 95:5, 98:2
- **Multi copy Tap:**
 - 4 copy Simplex
 - Split Ratio:
 - SM: 5: 4x23.75, 50: 4x12.5, 67: 4x8.25, 75: 4x6.25
- **Optional safety laser shutters**
- **32 Tower Tap LC™ modules per 1RU space**

Tower Tap MTP™



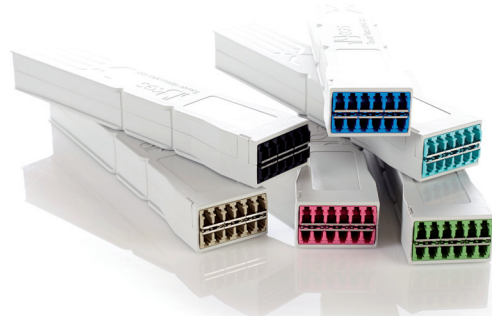
- **Multimode 40G, 100G Duplex Taps**
- **Split Ratio:**
 - MM: 50:50, 60:40, 70:30, 80:20, 90:10
 - SM: 1:2 split ratio 50:50
- **Duplex, Simplex**
- **Multi copy Tap:**
 - 2 copy Duplex
 - Split Ratio:
 - SM $33\frac{1}{3}$: $33\frac{1}{3}$: $33\frac{1}{3}$
- **Multi Tap:**
 - 4, 8, 16, 24 per module
 - Split Ratio:
 - SM: 50:50, 70:30, 80:20, 90:10, 95:5, 98:2
- **20 Tower Tap MTP™ modules per 1RU space**

Tower Tap MXC™



- **Multimode 40G, 100G Duplex Taps**
- **Split Ratio:**
 - MM: 50:50, 60:40, 70:30, 80:20, 90:10
 - SM: 1:2 split ratio 50:50
- **Duplex, Simplex**
- **Multi copy Tap:**
 - 2 copy Duplex
 - Split Ratio:
 - SM $33\frac{1}{3}$: $33\frac{1}{3}$: $33\frac{1}{3}$
- **Multi Tap:**
 - 4, 8, 16, 24 per module
 - Split Ratio:
 - SM: 50:50, 70:30, 80:20, 90:10, 95:5, 98:2
- **20 Tower Tap MXC™ modules per 1RU space**

Tower Tap Dual LC™



- **Multimode (MM):** 1G, 10G
- **Single mode(SM):** 1G, 10G, 40G, And 100G
- **4 x Simplex, or 2 x Duplex Taps**
- **Split Ratio:**
 - MM: 50:50, 60:40, 70:30, 80:20, 90:10
 - SM: 50:50, 70:30, 80:20, 90:10, 95:5, 98:2
- **Multi copy Tap:**
 - 4 copy 2 x Simplex
 - 4 copy Duplex
 - Split Ratio:
 - SM: 5: 4x23.75, 50: 4x12.5, 67: 4x8.25, 75: 4x6.25
- **Optional safety laser shutters**
- **16 Tower Tap Dual LC™ modules per 1RU space**

Tower Chassis™ – 1RU Chassis Supports:

- 32 Tower Tap LC™ modules
- 20 Tower Tap MTP™ modules
- 20 Tower Tap MXC™ modules
- 16 Tower Tap Dual LC™ modules
- Advanced guiderail system for efficient mix and match of all four Tower Tap™ module types
- Ruggedized hard coated anodized aluminum coated with Teflon



Tower Fiber™ – High performance Pull Tab fibers series includes:

- 3m LC Switchable
- 3m LC Duplex
- 3m MPO-12 bendable boot
- 3m MPO-24 bendable boot
- The Tower fiber™ is an optional series of high quality fibers and terminations using a Pull-Tab extraction mechanism
- The Tower fiber™ series of fiber cables supports color coding scheme:
 - Multimode OM1, OM2, OM3, and OM4 fibers
 - Single mode UPC, APC fibers

