

## Engineered TAPs in Cassette

### Description:

Go!Foton's engineered TAPs are efficient solutions for rural and medium density FTTH deployments. FTTH deployments in areas with low to medium subscriber density can cost significantly more per home passed than in dense urban environment. With distributed tap architecture, fiber optics taps with a linear, daisy-chain topology are used instead of centralized splitters more commonly found with a traditional FDH Cabinet. Furthermore, the distributed tap architecture allows service providers to reach considerably more subscribers while actually using less distribution fibers!

Imagine taking a fiber in a fiber optic cable, cutting it in the middle, and splicing a tap in between. The optical signal passes through the tap and continues down the fiber while the tap drops off a portion of the signal for locally-connected subscribers. Multiple taps can be placed down the line until the optical link budget is exhausted.

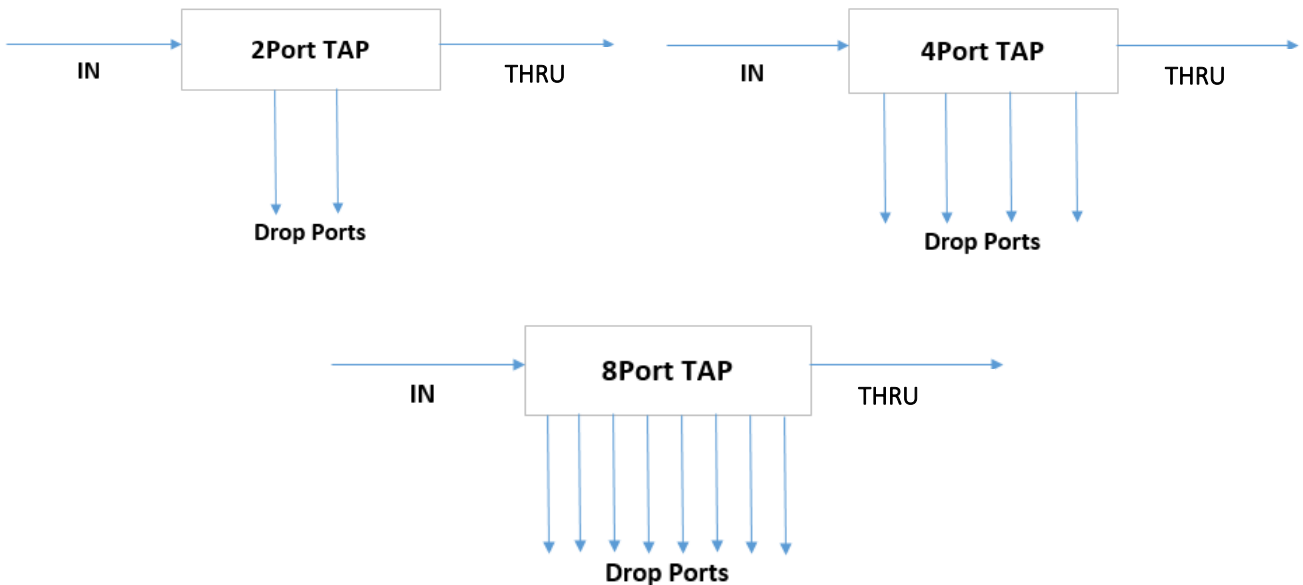
### Features:

- Less fiber required, same small fiber count cable can be used to pass all the homes
- Simplified design with less cable
- Lower cost and faster installation
- Certified to GR-1209/1221 Telcordia standards

### Applications:

- Rural and Medium Density FTTH deployments

### Schematic Drawings



# Engineered TAPs in Cassette

## Optical Specifications:

| Parameter                      | Unit | Specifications      |                      |
|--------------------------------|------|---------------------|----------------------|
| Operating Wavelength Range     | nm   | 1310±40 and 1550±40 |                      |
| Return Loss                    | dB   | ≥ 55                |                      |
| Directivity                    | dB   | ≥ 55                |                      |
| PDL                            | dB   | ≤ 0.20              |                      |
| Insertion Loss for 2-Port TAPs |      | Signal Port (THRU)  | Drop Ports (Spliced) |
| 21dB                           | dB   | ≤0.4                | 19.5~21.5            |
| 19dB                           | dB   | ≤0.5                | 16.5~18.5            |
| 17dB                           | dB   | ≤0.7                | 16.0~18.0            |
| 15dB                           | dB   | ≤0.8                | 14.2~15.8            |
| 14dB                           | dB   | ≤1.1                | 12.0~14.0            |
| 12dB                           | dB   | ≤1.3                | 10.5~12.5            |
| 10dB                           | dB   | ≤2.1                | 8.5~10.5             |
| 8dB                            | dB   | ≤2.7                | 7.5~9.5              |
| 7dB                            | dB   | ≤4.1                | 6.2~7.8              |
| 5dB                            | dB   | ≤6.0                | 4.2~5.8              |
| 4dB                            | dB   | -                   | ≤4.0                 |
| Insertion Loss for 4-Port TAPs |      | Signal Port (THRU)  | Drop Ports (Spliced) |
| 21dB                           | dB   | ≤0.6                | 18.5~20.5            |
| 19dB                           | dB   | ≤0.8                | 16.5~18.5            |
| 17dB                           | dB   | ≤1.0                | 15.5~17.5            |
| 15dB                           | dB   | ≤1.3                | 14.2~15.8            |
| 13dB                           | dB   | ≤2.0                | 12.2~13.8            |
| 11dB                           | dB   | ≤2.7                | 10.2~11.8            |
| 10dB                           | dB   | ≤4.0                | 9.0~11.5             |
| 9dB                            | dB   | ≤6.0                | 8.0~9.8              |
| 7dB                            | dB   | -                   | 6.2~7.8              |
| Insertion Loss for 8-Port TAPs |      | Signal Port (THRU)  | Drop Ports (Spliced) |
| 21dB                           | dB   | ≤0.8                | 20.0~22.0            |
| 19dB                           | dB   | ≤1.0                | 18.5~21.5            |
| 17dB                           | dB   | ≤1.3                | 16.5~18.5            |
| 15dB                           | dB   | ≤2.0                | 15.0~16.8            |
| 14dB                           | dB   | ≤2.7                | 14.2~15.8            |
| 12dB                           | dB   | ≤4.1                | 12.8~14.4            |
| 11dB                           | dB   | ≤6.0                | 11.0~12.8            |

Note: Insertion loss includes WDL, TDL and PDL but excludes connector losses.



## Engineered TAPs in Cassette

### Mechanical Specifications:

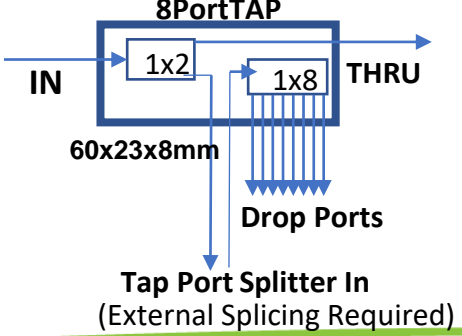
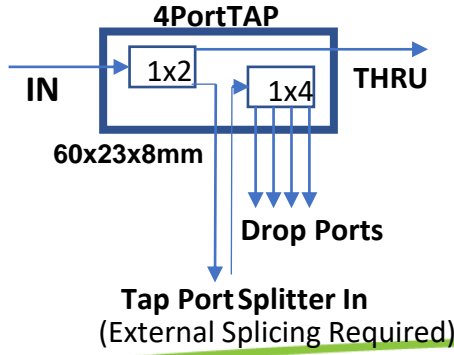
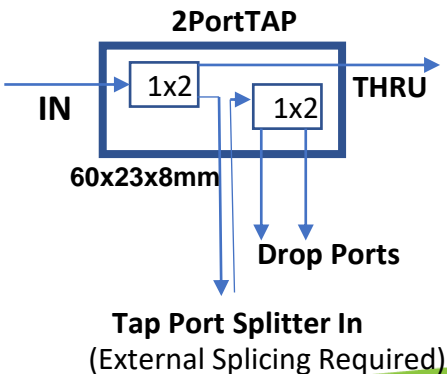
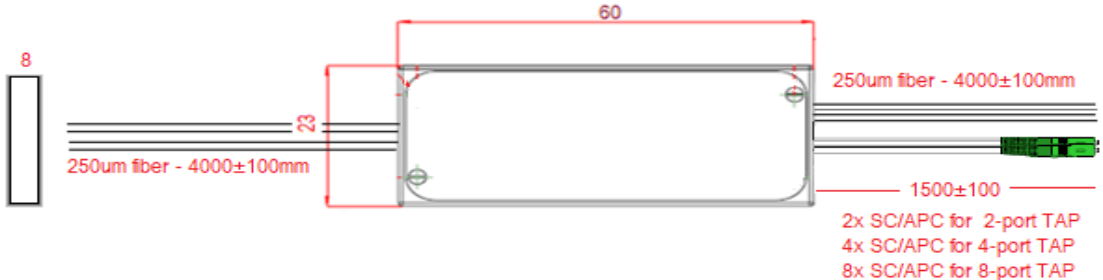
|  |  |   |
|--|--|---|
| Operating Temperature                      |  | -40°C to 85°C   |
| Operating humidity Range (No Condensation) |  | 5 to 95% RH   |
| Fiber Type                                 |  | ITU-T G657-A2, G657-B2 and G652-D compliant Single Mode fiber   |
| Buffer Type                                | IN, TAP, THRU                                      | 250um Bare Fiber  |
|  | Splitter Input (SP-IN)                             |   |
|  | Splitter Output (Drop Ports)                       | White 900um Loose Tube  |
| Connector Type                             | IN, TAP, THRU                                      | None  |
|  | Splitter Input (SP-IN)                             | SC/APC  |
|  | Splitter Output (Drop Ports)                       |   |
| Port Identification                        | IN, TAP, THRU                                      | Flag Label<br>Input – IN,<br>Tap Port – TAP<br>Thru PORT – THRU |
|  | Splitter Input (SP-IN)                             | Flag Label – (SP-IN)  |
|  | Splitter Output (Drop Ports)                       | Cable Markers – O1, O2, O3, ...                                 |
| Package Size                               | SP-IN and TAP needs external splicing.             | 60x23x8 mm  |
|  | SP-IN and TAP are pre-spliced inside the cassette. | 70x45x8 mm  |
| Package Material/Color                     |  | Black Aluminum  |



# Engineered TAPs in Cassette

## Ordering Guide:

| Item Number        | Description  |
|--------------------|--|
| TC1201FWXXXGFT020  | 1X2 SPLITTER 21DB TAP 99/1 SCA DROP PORTS 60X23X8  |
| TC1202FWXXXGFT020  | 1X2 SPLITTER 19DB TAP 98/2 SCA DROP PORTS 60X23X8  |
| TC1203FWXXXGFT020  | 1X2 SPLITTER 17DB TAP 97/3 SCA DROP PORTS 60X23X8  |
| TC1205FWXXXGFT020  | 1X2 SPLITTER 15DB TAP 95/5 SCA DROP PORTS 60X23X8  |
| TC1206FWXXXGFT020  | 1X2 SPLITTER 14DB TAP 94/6 SCA DROP PORTS 60X23X8  |
| TC1210FWXXXGFT020  | 1X2 SPLITTER 12DB TAP 90/10 SCA DROP PORTS 60X23X8 |
| TC1220FWXXXGFT020  | 1X2 SPLITTER 10DB TAP 80/20SCA DROP PORTS 60X23X8  |
| TC1225FWXXXGFT020  | 1X2 SPLITTER 8DB TAP 75/25 SCA DROP PORTS 60X23X8  |
| TC1230FWXXXGFT020  | 1X2 SPLITTER 7DB TAP 70/30 SCA DROP PORTS 60X23X8  |
| TC1240FWXXXGFT020  | 1X2 SPLITTER 5DB TAP 60/40 SCA DROP PORTS 60X23X8  |
| TC1200FWXXXGFT020  | 1X2 SPLITTER 4DB TERM SCA DROP PORTS 60X23X8       |
| TC1401FWXXXGFT021  | 1X4 SPLITTER 21DB TAP 99/1 SCA DROP PORTS 60X23X8  |
| TC1402FWXXXGFT021  | 1X4 SPLITTER 19DB TAP 98/2 SCA DROP PORTS 60X23X8  |
| TC1403FWXXXGFT021  | 1X4 SPLITTER 17DB TAP 97/3 SCA DROP PORTS 60X23X8  |
| TC1405FWXXXGFT021  | 1X4 SPLITTER 15DB TAP 95/5 SCA DROP PORTS 60X23X8  |
| TC1407FWXXXGFT021  | 1X4 SPLITTER 13DB TAP 93/7 SCA DROP PORTS 60X23X8  |
| TC1410FWXXXGFT021  | 1X4 SPLITTER 11DB TAP 90/10 SCA DROP PORTS 60X23X8 |
| TC1415FWXXXGFT021  | 1X4 SPLITTER 10DB TAP 85/15 SCA DROP PORTS 60X23X8 |
| TC1420FWXXXGFT021  | 1X4 SPLITTER 9DB TAP 80/20 SCA DROP PORTS 60X23X8  |
| TC1400FWXXXGFT021  | 1X4 SPLITTER 7DB TERM SCA DROP PORTS 60X23X8       |
| TC18005FWXXXGFT023 | 1X8 SPLITTER 22DB TAP 99.5/0.5 SCA DROP 60X23X8    |
| TC1801FWXXXGFT023  | 1X8 SPLITTER 21DB TAP 99/1 SCA DROP PORTS 60X23X8  |
| TC1802FWXXXGFT023  | 1X8 SPLITTER 19DB TAP 98/2 SCA DROP PORTS 60X23X8  |
| TC1803FWXXXGFT023  | 1X8 SPLITTER 17DB TAP 97/3 SCA DROP PORTS 60X23X8  |
| TC1805FWXXXGFT023  | 1X8 SPLITTER 15DB TAP 95/5 SCA DROP PORTS 60X23X8  |
| TC1806FWXXXGFT023  | 1X8 SPLITTER 14DB TAP 94/6 SCA DROP PORTS 60X23X8  |
| TC1810FWXXXGFT023  | 1X8 SPLITTER 12DB TAP 90/10 SCA DROP PORTS 60X23X8 |
| TC1800FWXXXGFT023  | 1X8 SPLITTER 11DB TERM SCA DROP PORTS 60X23X8      |



# Engineered TAPs in Cassette

## Ordering Guide:

| Item Number        | Description  |
|--------------------|--|
| TC1201FWXXXGFT024  | 1X2 SPLITTER 21DB TAP 99/1 SCA DROP PORTS 70X45X8  |
| TC1202FWXXXGFT024  | 1X2 SPLITTER 19DB TAP 98/2 SCA DROP PORTS 70X45X8  |
| TC1203FWXXXGFT024  | 1X2 SPLITTER 17DB TAP 97/3 SCA DROP PORTS 70X45X8  |
| TC1205FWXXXGFT024  | 1X2 SPLITTER 15DB TAP 95/5 SCA DROP PORTS 70X45X8  |
| TC1206FWXXXGFT024  | 1X2 SPLITTER 14DB TAP 94/6 SCA DROP PORTS 70X45X8  |
| TC1210FWXXXGFT024  | 1X2 SPLITTER 12DB TAP 90/10 SCA DROP PORTS 70X45X8 |
| TC1220FWXXXGFT024  | 1X2 SPLITTER 10DB TAP 80/20SCA DROP PORTS 70X45X8  |
| TC1225FWXXXGFT024  | 1X2 SPLITTER 8DB TAP 75/25 SCA DROP PORTS 70X45X8  |
| TC1230FWXXXGFT024  | 1X2 SPLITTER 7DB TAP 70/30 SCA DROP PORTS 70X45X8  |
| TC1240FWXXXGFT024  | 1X2 SPLITTER 5DB TAP 60/40 SCA DROP PORTS 70X45X8  |
| TC1200FWXXXGFT024  | 1X2 SPLITTER 4DB TERM SCA DROP PORTS 70X45X8       |
| TC1401FWXXXGFT025  | 1X4 SPLITTER 21DB TAP 99/1 SCA DROP PORTS 70X45X8  |
| TC1402FWXXXGFT025  | 1X4 SPLITTER 19DB TAP 98/2 SCA DROP PORTS 70X45X8  |
| TC1403FWXXXGFT025  | 1X4 SPLITTER 17DB TAP 97/3 SCA DROP PORTS 70X45X8  |
| TC1405FWXXXGFT025  | 1X4 SPLITTER 15DB TAP 95/5 SCA DROP PORTS 70X45X8  |
| TC1407FWXXXGFT025  | 1X4 SPLITTER 13DB TAP 93/7 SCA DROP PORTS 70X45X8  |
| TC1410FWXXXGFT025  | 1X4 SPLITTER 11DB TAP 90/10 SCA DROP PORTS 70X45X8 |
| TC1415FWXXXGFT025  | 1X4 SPLITTER 10DB TAP 85/15 SCA DROP PORTS 70X45X8 |
| TC1420FWXXXGFT025  | 1X4 SPLITTER 9DB TAP 80/20 SCA DROP PORTS 70X45X8  |
| TC1400FWXXXGFT025  | 1X4 SPLITTER 7DB TERM SCA DROP PORTS 70X45X8       |
| TC18005FWXXXGFT026 | 1X8 SPLITTER 22DB TAP 99.5/0.5 SCA DROP 70X45X8    |
| TC1801FWXXXGFT026  | 1X8 SPLITTER 21DB TAP 99/1 SCA DROP PORTS 70X45X8  |
| TC1802FWXXXGFT026  | 1X8 SPLITTER 19DB TAP 98/2 SCA DROP PORTS 70X45X8  |
| TC1803FWXXXGFT026  | 1X8 SPLITTER 17DB TAP 97/3 SCA DROP PORTS 70X45X8  |
| TC1805FWXXXGFT026  | 1X8 SPLITTER 15DB TAP 95/5 SCA DROP PORTS 70X45X8  |
| TC1806FWXXXGFT026  | 1X8 SPLITTER 14DB TAP 94/6 SCA DROP PORTS 70X45X8  |
| TC1810FWXXXGFT026  | 1X8 SPLITTER 12DB TAP 90/10 SCA DROP PORTS 70X45X8 |
| TC1800FWXXXGFT026  | 1X8 SPLITTER 11DB TERM SCA DROP PORTS 70X45X8      |

Notes: For 70x45x8 mm package option, TAP & Splitter In ports are already spliced inside the cassette.

