



Optical distributed taps, known also as uneven-split or asymmetric terminals, are most appropriate for short length, dense environments or low dense applications where lean distribution runs are desired. Each run supports 32 or 64 subscriber ONTs with cascaded multiport terminals utilizing preconnectorized single-fiber assemblies in the distribution. The fully preconnectorized system reduces installation costs while increasing the speed of deployment.

This solution is comprised of an array of power-split ratios to customize each run for optimal signal reach. Tap splits of 90/10, 85/15, 80/20, 70/30, and 60/40 split ratios can be cascaded, or daisy-chained, to accommodate a wide variety of deployment scenarios.

There are two models of fully sealed terminals available for this architecture: the BPEO CT Multiport andUCAO Multiport terminals, to serve 8 or 16 subscribers, respectively.

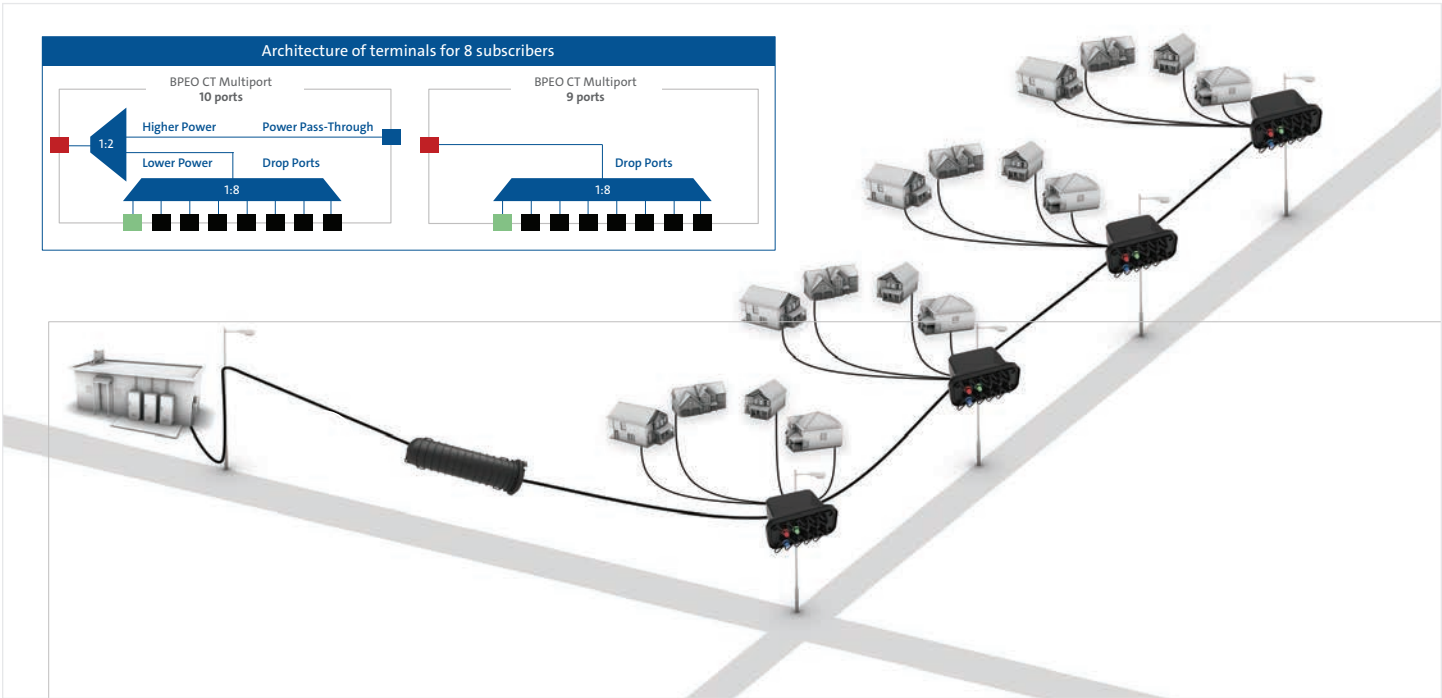
The number of terminals and the respective signal division rates used in each implementation depend on the distances between the terminals and the subscribers, in order to guarantee an acceptable link power budget. By limiting the number of terminal options and using pre-wired OptiTap® drop cables, FTTx projects and material inventories can be simplified.

Features	Benefits
OptiTap® Connector Ports for Drop Termination	Lower installation cost and increased speed of interconnection
Stubless Multiport Terminal System	Reduces distribution cable fiber count; allows full plug and play distribution deployment, without requiring splicing
Full Preconnectorized Single-Fiber Architecture	A cost-effective solution that diverts a portion of power to support a typical run of 32 to 64 ONTs
Factory-Installed and Tested Connectors	Connector design provides stability, reliability, and durability
Supports Various Power Split Ratios	Solutions available to accommodate numerous combinations of power split ratio designs
Rapid Repair/Restoration	Damaged single-fiber preconnectorized drops can be repaired quickly with low-skill technicians to restore subscriber services
Dual-Ended 5 mm round drop; Fig.8 compact or ROC™ Drop Assembly	5 mm round drop; Fig.8 compact or ROC™ drop assemblies terminated with OptiTap connectors on both ends provide quick and efficient connectivity between terminals

The distributed tap architecture leverages a cascaded network of uneven-split, or asymmetric split, multiport terminals to ensure sufficient signal reaches subscribers along the route. As the first terminal is closest to the signal source (OLT), a lower amount of signal is needed to feed the subscribers served from 1x8 splitter.

In many cases, the first multiport terminal will utilize a 90/10 power split where the 10% feeds the subscriber ports and the 90% passes on to feed subsequent terminals downstream. Subsequent terminals in the chain either maintain a similar uneven-split ratio or a higher ratio of local power depending upon the distances between terminals and the total link budget.

In higher density environments with short distances between terminals, operators may serve more than the standard 32 or 64 subscribers. However, in low-density runs spanning long distances, operators may serve fewer subscribers per route as this is heavily dependent upon the link budget.



Specifications of Distributed Tap Network Terminals



BPEO CT Multiport Terminals



UCAO Multiport Terminals

Mechanical Specifications	BPEO CT Multiport Terminals	UCAO Multiport Terminals
Application	Aerial, duct, direct-buried	Aerial, duct, direct-buried
Dimensions	230 x 173 x 116 mm	400 x 160 x 185 mm
Weight (without hanging bracket)	9-port terminal: 0.6 kg 10-port terminal: 0.7 kg	17-port terminal: 1.59 kg 18-port terminal: 1.61 kg
Packaging	Individual packaging	Individual packaging
Termination	OptiTap® connector ports	OptiTap connector ports

Environmental Characteristics	BPEO CT Multiport Terminals	UCAO Multiport Terminals
Temperature Rating	-25°C to 75°C	-25°C to 75°C

Standards	BPEO CT Multiport Terminals	UCAO Multiport Terminals
ANATEL	Category III	Category III

Optical Terminal Specifications for Distributed Tap Networks

The BPEO CT Multiport 10-port terminal includes one 1x2 uneven, asymmetric splitter and one 1x8 splitter to support customer connections, as well as a pass-through port feeding subsequent terminals in the run in a single form factor.

The BPEO CT Multiport 9-port terminal has one standard 1x8 splitter to support customer connections, designed to be used as the last terminal of the chain.



BPEO CT Multiport 9- and 10-port Terminals

10-Port BPEO CT Multiport Optical Specifications

Splitter Type	Connector Port	Insertion Loss, Maximum	Insertion Loss, Typical	Reflectance, Typical
90/10 + 1x8	Blue (Pass-Through Port)	0.73 dB	0.65 dB	-55 dB
	Green and black (Drop Port)	21.54 dB	19.85 dB	-55 dB
85/15 + 1x8	Blue (Pass-Through Port)	1.13 dB	1.00 dB	-55 dB
	Green and black (Drop Port)	20.78 dB	19.19 dB	-55 dB
80/20 + 1x8	Blue (Pass-Through Port)	1.25 dB	1.10 dB	-55 dB
	Green and black (Drop Port)	18.25 dB	17.01 dB	-55 dB
70/30 + 1x8	Blue (Pass-Through Port)	2.22 dB	1.95 dB	-55 dB
	Green and black (Drop Port)	16.51 dB	15.42 dB	-55 dB
60/40 + 1x8	Blue (Pass-Through Port)	2.73 dB	2.40 dB	-55 dB
	Green and black (Drop Port)	15.32 dB	14.37 dB	-55 dB

9-Port BPEO CT Multiport Optical Specifications

Splitter Type	Connector Port	Insertion Loss, Maximum	Insertion Loss, Typical	Reflectance, Typical
Splitter 1x8	Green and black (Drop Port)	10.50 dB	10.13 dB	-55 dB

Optical Terminal Specifications for Distributed Tap Networks

The UCAO Multiport 18-port terminal includes one 1x2 uneven, asymmetric splitter and one 1x16 splitter to support customer connections, as well as a pass-through port feeding subsequent terminals in the run in a single form factor.

The BPEO CT Multiport 17-port terminal has one standard 1x16 splitter to support customer connections, designed to be used as the last terminal of the chain.



UCAO Multiport 17- and 18-port Terminals

18-Port UCAO Multiport Optical Specifications

Splitter Type	Connector Port	Insertion Loss, Maximum	Insertion Loss, Typical	Reflectance, Typical
90/10 + 1x16	Blue (Pass-Through Port)	0.73 dB	0.65 dB	-55 dB
	Green and black (Drop Port)	24.74 dB	23.42 dB	-55 dB
85/15 + 1x16	Blue (Pass-Through Port)	1.13 dB	1.00 dB	-55 dB
	Green and black (Drop Port)	23.98 dB	22.76 dB	-55 dB
80/20 + 1x16	Blue (Pass-Through Port)	1.25 dB	1.10 dB	-55 dB
	Green and black (Drop Port)	21.45 dB	20.58 dB	-55 dB
70/30 + 1x16	Blue (Pass-Through Port)	2.22 dB	1.95 dB	-55 dB
	Green and black (Drop Port)	19.71 dB	18.99 dB	-55 dB
60/40 + 1x16	Blue (Pass-Through Port)	2.73 dB	2.40 dB	-55 dB
	Green and black (Drop Port)	18.52 dB	17.94 dB	-55 dB

17-Port UCAO Multiport Optical Specifications

Splitter Type	Connector Port	Insertion Loss, Maximum	Insertion Loss, Typical	Reflectance, Typical
Splitter 1x16	Green and black (Drop Port)	13.7 dB	13.4 dB	-55 dB

BPEO CT Multiport 9- and 10-port Terminals



BPEO CT Multiport Terminal 10 ports



BPEO CT Multiport Terminal 9 ports

Part Number Configurator

BPEO - CT - MP10 - - -

1
2
3

- 1** Defines tap value loss configuration
- 9010 = 90/10 Power Split
 - 8515 = 85/15 Power Split
 - 8020 = 80/20 Power Split
 - 7030 = 70/30 Power Split
 - 6040 = 60/40 Power Split

- 2** Defines mounting bracket
- O = None
 - P = Pole
 - U = Pole/strand

- 3** Defines country/region*
- NO = México, Central América, Caribbean
 - SU = South América (except Brazil)
 - BR = Brazil
- *custom configurations available (upon request)*

BPEO - CT - MP9 - -

1
2

- 1** Defines mounting bracket
- O = None
 - P = Pole
 - U = Pole/strand

- 2** Defines country/region*
- NO = México, Central América, Caribbean
 - SU = South America (except Brazil)
 - BR = Brazil
- *custom configurations available (upon request)*

UCAO Multiport 17- and 18-port Terminals



UCAO Multiport Terminal 18 ports



UCAO Multiport Terminal 17 ports

Part Number Configurator

U M - M P 18 - 1116 - - -

1
2
3

1 Defines tap value loss configuration

- 9010 = 90/10 Power Split
- 8515 = 85/15 Power Split
- 8020 = 80/20 Power Split
- 7030 = 70/30 Power Split
- 6040 = 60/40 Power Split

2 Defines mounting bracket

- O = None
- P = Pole
- U = Pole/strand

3 Defines country/region*

- NO = México, Central América, Caribbean
- SU = South América (except Brazil)
- BR = Brazil

**custom configurations available (upon request)*

U M - M P 17 - 1116 - -

1
2

1 Defines mounting bracket

- O = None
- P = Pole
- U = Pole/strand

2 Defines country/region*

- NO = México, Central América, Caribbean
- SU = South America (except Brazil)
- BR = Brazil

**custom configurations available (upon request)*

LSZH™ 5 mm Round Dielectric Drop Cable Assembly, 1F Single Tube

Corning indoor/outdoor 5 mm round drop assembly is a robust and flexible cable that provides durability and reliability in terminal-to-terminal connections for distributed tap architectures. The cable is designed for short-span, self-supporting aerial installations as well as to be installed on facades, poles, and ducts in FTTH deployments. An LSZH flame retardant and UV protected jacket allows for both indoor and outdoor use.



LSZH 5 mm Round OptiTap® Jumper Assembly



LSZH 5 mm Round OptiTap Drop Assembly

Part Number Configurator

1

2

015Z

3

4

5

B

M

-

C

A

L

A

1 First Connector Type

00 = No connector
 43 = OptiTap®
 UU = Multi Interface

2 Second Connector Type

43 = OptiTap
 UU = Multi Interface

3 Insertion Loss (max)

3 = 0.3 dB
 5 = 0.5 dB

4 Fiber Type

1 = A1
 2 = A2

5 Cable Length (meters)

005	220
030	250
050	300
070	350
080	400
100	450
120	500
150	600
200	

Figure-8 Low Friction Compact Drop Cable Assembly

As an industry leader in optical connectivity products, Corning designs and manufactures the low-friction figure-8 drop cable assembly with factory-terminated, environmentally sealed and hardened connectors to reduce the cost and time of drop cable deployment. Corning OptiTap® connector design provides superior durability and reliability in the drop segment of the network. This new assembly also offers significant improvements in cable management.



Figure-8 Low-Friction OptiTap® Jumper Assembly



Figure-8 Low-Friction OptiTap Drop Assembly

Part Number Configurator

□	□	□	□	0	1	C	□	□	□	□	□	□	□	M - C A L A	
1	2					3	4	5	6						7

1 First Connector Type

00 = No connector
 43 = OptiTap®
 UU = Multi Interface

2 Second Connector Type

43 = OptiTap
 UU = Multi Interface

3 Cable Characteristics

L = Low Friction, LSZH™
 F = Non-Low-Friction, Non-LSZH
 Z = Low-Friction, Non-LSZH
 N = Non-Low-Friction, LSZH

4 Insertion Loss (max)

3 = 0.3 dB
 5 = 0.5 dB

5 Fiber Type

1 = A1
 2 = A2

6 Jacket Color

B = Black
 G = Gray

7 Cable Length (meters)

030	220
050	250
070	300
080	350
100	400
120	450
150	500
200	600

ROC™ Drop Cable Assembly with FastAccess® Technology, 900 μm

As an industry leader in optical connectivity products, Corning designs and manufactures the ROC™ drop cable assembly with factory-terminated, environmentally sealed and hardened connectors to reduce the cost and time of drop cable deployment. Corning OptiTap® connector design provides superior durability and reliability in the drop segment of the network. This new assembly also offers significant improvements in cable management.



OptiTap® ROC™ Drop Jumper Assembly



OptiTap ROC Drop Assembly

Part Number Configurator

1

2

0 1 R N

3

4

5

M - C A L A

- 1 First Connector Type**
00 = No connector
43 = OptiTap®
- 2 Second Connector Type**
43 = OptiTap

- 3 Insertion Loss (max)**
3 = 0.3 dB
5 = 0.5 dB
- 4 Fiber Type**
1 = A1
2 = A2

- 5 Cable Length (meters)**
- 005 220
- 030 250
- 050 300
- 070 350
- 080 400
- 100 450
- 120 500
- 150 600
- 200



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