



## 310/310M-Type Connector

### Improved, Compact Design Increases Frame Density on Conventional Distributing Frames

The 310/310M-Type Connector is a high-density connector used to terminate outside plant cables on low-profile or tall conventional distributing frames. The connector is easy to install and extends only 7 inches from the vertical frame on which it is mounted. For added convenience, the enhanced 310M-Type Connector offers a new angled mounting option, extending at a 12.5° angle from the face of the vertical frame mounting bar. This provides “semi” front-facing test, cross-connect and protector unit fields, which facilitate testing, jumper terminating as well as protector unit administration.

The left face of the connector has room for 100 3-, 4- or 7-Type Protector Units, arranged in two 5 by 10 arrays. The protector units must be ordered separately. When installed, the connector is only 9 3/8 inches high and 4 inches wide — with 4- or 7-Type protector units installed. Occupying half the vertical space of the 303-Type Connector, this compact design allows you to increase the frame density on conventional distributing frames currently using 303 or earlier designed connectors.

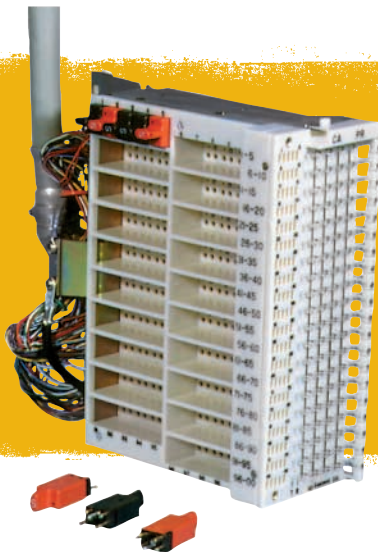
### Variety of Cross-Connect Options

In the cross-connect field you can choose from three options. Each option is compatible with the high-density central office connecting blocks:

- single wire-wrap design
- bifurcated wire-wrap design
- punch-on, bifurcated quick-clip arrangement (eliminates need for wire stripping and wrapping).

### Easy Access to the Frame

The 310/310M-Type Connector comes with both 24 (0.51 mm) and 22 (0.64 mm) AWG stub cables, and you can choose stub cable in six standard lengths: 30 ft. (9.1 m), 50 ft. (15.2 m), 80 ft. (24.4 m), 100 ft. (30.5 m), 150 ft. (45.7 m), and 200 ft. (61.0 m). Variable stub lengths are available on request. The stub cables are swivel-mounted, so you'll be sure to have easy access for either top or bottom feed frames.





## Quick, Easy Installation

Before we send the 310/310M-Type Connector to you, we factory apply pair identification on the protector unit panel, cross-connect, test fields, and the front and rear fanning strips to reduce the time you need to spend field stenciling.

## Versatility

For easy termination of pair-gain systems, you can choose a stubless 310/310M-Type Connector, and for T1 Carriers, we offer dual 50-pair stubs. Factory preconnectorized versions using either 710 or 711 Splicing Connectors are also available. In addition, the enhanced 310/310M-Type Connector offers:

- Improved pair identification between test, cross-connect and protector unit fields.
- High density which permits an 800 pair vertical arrangement in only 75 inches of mounting space for low profile environments.
- Positive interlocking for vertical alignment and mounting stability.
- Protector panel “Gridwork” divider which provides a guide for easy insertion, removal and identification of the protector units.

## Simplified Operations

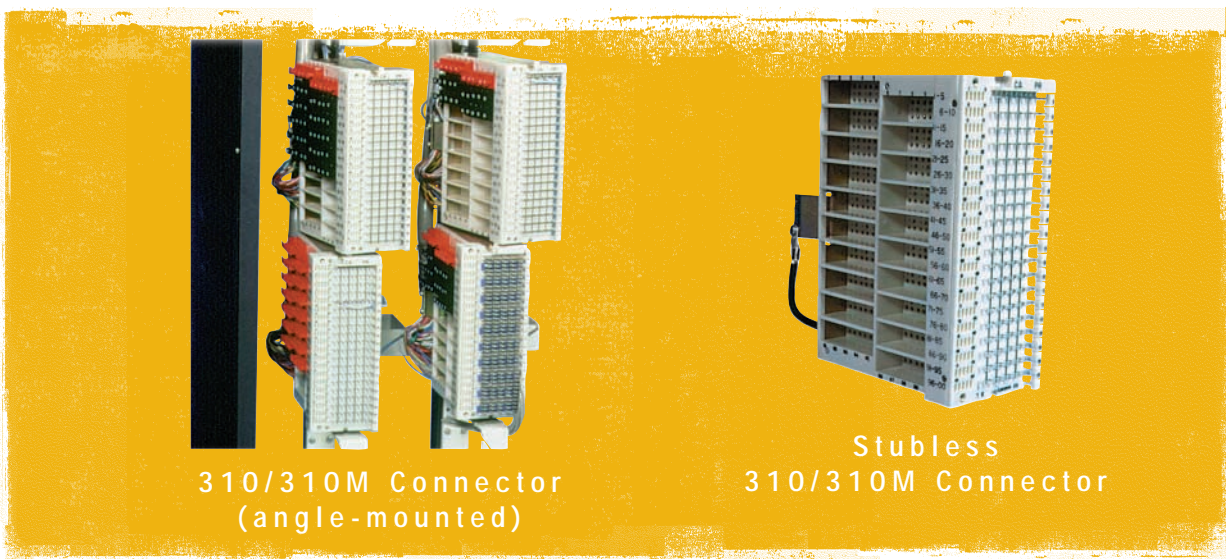
Front-facing test and cross-connect fields make testing and day-to-day operations easier. We have designed the 310/310M-Type Connector to use the T-test connector for multiple pair access to help reduce test effort. To facilitate jumper running, we have built in snap-through primary and secondary cross-connect fanning strips. An optional 29A Isolated Ground Kit is available for 310/310M environments requiring non-frame derived ground systems, such as some independent telephone companies, private networks and federal systems projects. The kit also eliminates the need for non-conductive mounting insulators.

## Compatibility

The 310/310M-Type Connector accommodates 3-, 4- or 7-Type unit protectors, recognized industry standards, so you won't have to worry about fit or compatibility.

## Modernization

The 310/310M-Type Connector provides a direct replacement for the 305-Type Connector, allowing you to modernize existing frames — easily and quickly.



310/310M Connector  
(angle-mounted)

Stubless  
310/310M Connector

### 310-Type Connector Specifications (Standard)

Code	Cross-Connect Terminal Type	Quantity/Pair Size	Stub Cable Gauge	Mounting Direction	Application
310A2-100	Wire-wrap	1-100	24 (.51 mm)	Down/Up	OSP Facility Pairs
310B2-100	Wire-wrap	1-100	22 (.64 mm)	Down/Up	OSP Facility Pairs
310E1-100	Wire-wrap	0		No Stub	Pair Gain Systems
310B1-50	Wire-wrap	2-50	22 (.64 mm)	Down	T1 Carrier
310D1-50	Wire-wrap	2-50	22 (.64 mm)	Up	T1 Carrier
310TBA1-100	Bifurcated Quick Clip	1-100	24 (.51 mm)	Down/Up	OSP Facility Pairs
310TBB1-100	Bifurcated Quick Clip	1-100	22 (.64 mm)	Down/Up	OSP Facility Pairs
310TBE1-100	Bifurcated Quick Clip	0		No Stub	Pair Gain Systems
310BWA1-100	Bifurcated Wire-wrap	1-100	24 (.51 mm)	Down/Up	OSP Facility Pairs
310BWB1-100	Bifurcated Wire-wrap	1-100	22 (.64 mm)	Down/Up	OSP Facility Pairs
310BWE1-100	Bifurcated Wire-wrap	0		No Stub	Pair Gain Systems

### Enhanced Design 310-Type Connector Specifications \* (Angled Mounting Orientation)

Code	Cross-Connect Terminal Type	Quantity/Pair Size	Stub Cable Gauge	Mounting Direction	Application
310MA1-100	Single Wire-Wrap	1-100	24 (.51 mm)	Down/Up	OSP Facility Pairs
310MB1-100	Single Wire-Wrap	1-100	22 (.64 mm)	Down/Up	OSP Facility Pairs
310ME1-100	Single Wire-Wrap	0		No Stub	Pair Gain Systems
310MBWA1-100	Bifurcated Wire-Wrap	1-100	24 (.51 mm)	Down/Up	OSP Facility Pairs
310MBWB1-100	Bifurcated Wire-Wrap	1-100	22 (.64 mm)	Down/Up	OSP Facility Pairs
310MBWE1-100	Bifurcated Wire-Wrap	0		No Stub	Pair Gain Systems
310MTBA1-100	Bifurcated Quick-Clip	1-100	24 (.51 mm)	Down/Up	OSP Facility Pairs
310MTBB1-100	Bifurcated Quick-Clip	1-100	22 (.64 mm)	Down/Up	OSP Facility Pairs
310MTBE1-100	Bifurcated Quick-Clip	0		No Stub	Pair Gain Systems



## Ordering Information

### 310 Type Conductor

Product Code	Description	Stub Length	Material ID (Comcode)
<i>24 AWG (.51 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub Single Wire-Wrap (SWW)</i>			
310A2-100-30	Connector	30' (9.1 m)	103 760 872
310A2-100-50	Connector	50' (15.2 m)	103 868 972
310A2-100-80	Connector	80' (24.4 m)	103 868 980
310A2-100-100	Connector	100' (30.5 m)	103 868 998
310A2-100-150	Connector	150' (45.7 m)	103 869 004
310A2-100-200	Connector	200' (61.0 m)	103 869 012
<i>22 AWG (.64 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub Single Wire-Wrap (SWW)</i>			
310B2-100-30	Connector	30' (9.1 m)	103 760 880
310B2-100-50	Connector	50' (15.2 m)	103 869 020
310B2-100-80	Connector	80' (24.4 m)	103 869 038
310B2-100-100	Connector	100' (30.5 m)	103 869 046
310B2-100-150	Connector	150' (45.7 m)	103 869 053
310B2-100-200	Connector	200' (61.0 m)	103 869 061
<i>Stubless</i>			
310E1-100 (SWW)	Connector		103 551 867
<i>24 AWG (.51 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub Bifurcated Quick Clip (BQC)</i>			
310TBA1-100-30	Connector	30' (9.1 m)	103 749 552
310TBA1-100-50	Connector	50' (15.2 m)	103 731 444
310TBA1-100-100	Connector	100' (30.5 m)	103 731 469
310TBA1-100-150	Connector	150' (45.7 m)	103 731 477
310TBA1-100-200	Connector	200' (61.0 m)	103 731 485
<i>22 AWG (.64 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub Bifurcated Quick Clip (BQC)</i>			
310TBB1-100-50	Connector	50' (15.2 m)	103 731 493
310TBB1-100-80	Connector	80' (24.4 m)	103 731 501
310TBB1-100-100	Connector	100' (30.5 m)	103 731 519
310TBB1-100-150	Connector	150' (45.7 m)	103 731 527
<i>Stubless</i>			
310TBE1-100 (BQC)	Connector		103 749 594
<i>24 AWG (.51 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub Bifurcated Wire-Wrap (BWW)</i>			
310BW-A1-100-30	Connector	30' (9.1 m)	104 187 844
310BW-A1-100-50	Connector	50' (15.2 m)	104 287 255
310BW-A1-100-80	Connector	80' (24.4 m)	104 287 263
310BW-A1-100-100	Connector	100' (30.5 m)	104 287 271
310BW-A1-100-150	Connector	150' (45.7 m)	104 287 289
310BW-A1-100-200	Connector	200' (61.0 m)	104 287 297
<i>22 AWG (.64 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub Bifurcated Wire-Wrap (BWW)</i>			
310BW-B1-100-30	Connector	30' (9.1 m)	104 187 851
310BW-B1-100-50	Connector	50' (15.2 m)	104 287 305
310BW-B1-100-80	Connector	80' (24.4 m)	104 287 313
310BW-B1-100-100	Connector	100' (30.5 m)	104 287 321
310BW-B1-100-150	Connector	150' (45.7 m)	104 287 339
310BW-B1-100-200	Connector	200' (61.0 m)	104 287 347



## Ordering Information (continued)

### 310 Type Conductor

Product Code	Description	Stub Length	Material ID (Comcode)
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#### *Stubless*

310BW-E1-100 (BWW)	Connector		104 187 869
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#### *Dual 22 AWG (.64 mm) Cable Stubs, 50 Pair Capacity Each (Transmit & Receive)*

##### *Down Mounted Stub*

310B1 50-30	Connector	30' (9.1 m)	103 655 999
310B1-50-100	Connector	100' (30.5 m)	103 725 354

#### *Dual 22 AWG (.64 mm) Cable Stubs, 50 Pair Capacity Each (Transmit & Receive)*

##### *Up Mounted Stub*

310D1-50-50	Connector	50' (15.2 m)	103 725 388
310D1-50-100	Connector	100' (30.5 m)	103 725 404

### 310M Type Conductor

#### *Stubless/Angled Mounting*

310ME1-100 (SWW)	Connector	—	104 401 591
310MBW-EA-100 (BWW)	Connector	—	104 407 291
310MTB-E1-100 (BQC)	Connector	—	104 407 325
310MA1-100-30	Connector	30' (9.1 m)	104 401 575
310MA1-100-50	Connector	50' (15.2 m)	105 267 454
310MA1-100-80	Connector	80' (24.4 m)	105 267 462
310MA1-100-100	Connector	100' (30.5 m)	105 267 470
310MA1-100-150	Connector	150' (45.7 m)	105 267 488
310MA1-100-200	Connector	200' (61.0 m)	105 267 496

#### *Bifurcated Wire-Wrap (BWW)*

310MBWA1-100-50	Connector	50' (15.2 m)	105 314 371
310MBWA1-100-80	Connector	80' (24.4 m)	105 314 389
310MBWA1-100-100	Connector	100' (30.5 m)	105 314 397
310MBWA1-100-150	Connector	150' (45.7 m)	105 314 405

#### *Bifurcated Quick Clip (BQC)*

310MTBA1-100-30	Connector	30' (9.1 m)	104 407 309
310MTBA1-100-50	Connector	50' (15.2 m)	105 315 055
310MTBA1-100-80	Connector	80' (24.4 m)	105 315 063
310MTBA1-100-100	Connector	100' (30.5 m)	105 315 071

#### *22 AWG (.64 mm) Cable Stubs, 100 Pair Capacity/Swivel Mounted Stub/Angled Mounting*

##### *Single Wire-Wrap (SWW)*

310MB1-100-30	Connector	30' (9.1 m)	104 401 583
310MB1-100-50	Connector	50' (15.2 m)	105 267 504
310MB1-100-80	Connector	80' (24.4 m)	105 267 512
310MB1-100-100	Connector	100' (30.5 m)	105 267 520
310MB1-100-150	Connector	150' (45.7 m)	105 267 538

#### *Bifurcated Wire-Wrap (BWW)*

310MBWB1-100-30	Connector	30' (9.1 m)	104 407 283
310MBWB1-100-50	Connector	50' (15.2 m)	105 314 439
310MBWB1-100-100	Connector	100' (30.5 m)	105 315 006

#### *Bifurcated Quick Clip (BQC)*

310MTBB1-100-50	Connector	50' (15.2 m)	105 315 105
310MTBB1-100-80	Connector	80' (24.4 m)	105 315 113
310MTBB1-100-100	Connector	100' (30.5 m)	105 315 121

**310/310M Connector  
rear-view with  
secondary fanning  
strip and cover**



**Distributing Frame Vertical Capacities**

Distributing Frame Height		Quantity of 310/310M's Per Vertical	Quantity of Terminated Pairs
(Feet)	(Meters)		
7.0	2.1 m	6	600
8.0	2.4 m	8	800
9.0	2.7 m	10	1000
11.5	3.5 m	12	1200

\* Restrictions: When Distributing Frame is enlarged right-to-left, a vertical must be skipped if mounting the enhanced 310M Connector to the left of standard Avaya 305 or 310 Connectors.

**Avaya Reference Documents**

Title	Document Number
310/310M Type Connectors Description, Use, Installation, and Repair Procedures	Avaya 201-208-113 also available as Avaya 636-330-110
Cable Terminating Apparatus, Selection, Distributing and Protector Frames	Avaya 201-208-050 also available as Avaya 636-300-099
3-, 4-, 5-, and 7-Type Protector Units Description, Use, Maintenance, and Test Procedures	Avaya 201-208-100 also available as Avaya 636-300-050
Distributing Frame Systems Products Manual (DFSPM)	Avaya 201-200-050, Issue 5 12/93

For more information on our products, please contact your Avaya Sales Representative or call 1-800-344-0223. You can also visit our website at <http://www.avaya.com/connectivity>

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