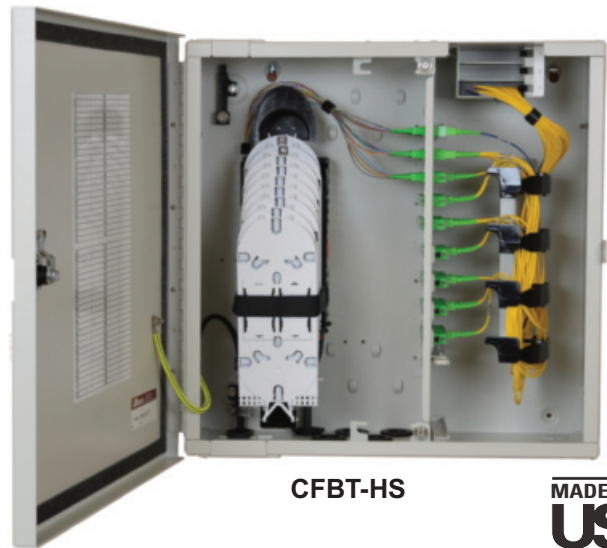


# Charles Fiber Building Terminal (CFBT) Hubs

## Indoor Fiber Distribution Hub for Passive Optical Networks (GPON/EPON)

CFBT Hubs provide fiber distribution to up to 288 subscribers from a compact, indoor terminal. CFBT Hubs have been designed with flexibility in mind and support fusion, pre-terminated and field terminated feed and drop fibers. These PON terminals have space for multiple 1x32 splitters for incremental growth. They are commonly mounted to an interior wall of a multi-dwelling unit (MDU) for distribution to centralized or distributed Optical Network Terminals (ONT).



Everything about the interior of the **CFBT-HS** (standard hub) is designed with the technician in mind. Cable entry locations are positioned at the top and bottom of the enclosure, allowing flexible placement of feed and distribution cables. Fiber bend radius controls and routing guides ensure cable management and proper slack storage. A splice tray basket secures hinged splice trays that are individually accessible without disturbing previously spliced trays. The splice tray basket is itself removable for pre-terminated and field terminated applications. A hinged bulkhead increases the technician's working area for greater

access to the SC adapter panels. The bulkhead includes nine rows of 12-count adapters. The top row is dedicated to feed fibers and features shuttered adapters. The remaining eight rows create up to 96 drop locations. Three splitter slots are easily accessible. Charles 1x32 Passive Splitter Modules (CFSM) are available with optimized pigtail lengths.



CFBT Hubs are constructed from powder-coated aluminum that is both durable and lightweight. The unit can be quickly installed by a single technician. The main entrance door is secured with a low-profile, 216-tool quarter turn lock and padlock hasp for additional access control. Both internal and external bond locations are provided. A compact hub (**CFBT-HC**) option is available for applications of up to 48 subscribers, ideal for small sized MDU. For larger deployments, an expanded capacity hub (**CFBT-HX**) for up to 144 subscribers and an ultra capacity hub (**CFBT-HU**) for up to 384 subscribers are available.

## Applications



Garden Apartments



Low-Rise MDU



Mid-Rise MDU

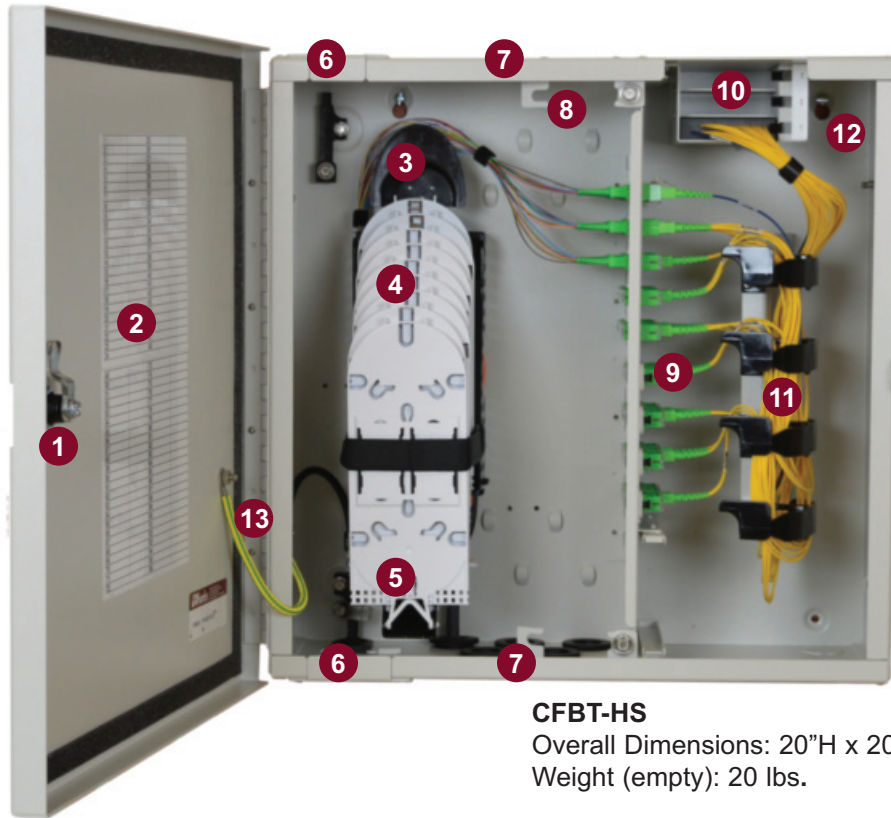


High-Rise MDU

CFBT Hubs provide PON fiber distribution for up to 288 subscribers at multi-user locations, with grow-as-you-go scalability.



# CFBT-HS Product Features



**CFBT-HS**  
 Overall Dimensions: 20”H x 20”W x 7”D  
 Weight (empty): 20 lbs.

- 1 216-tool hex-head quarter turn lock
- 2 Fiber identification label
- 3 Bend radius controls
- 4 Removable splice tray basket
- 5 Hinged splice trays (up to 9 tray capacity)
- 6 Feed cable grommet locations (x2)
- 7 Distribution cable grommet locations (x10)
- 8 Hinged bulkhead (locks in two positions)
- 9 Bulkhead adapters (9 rows @ 12 adapters)
- 10 Three 1x32 splitter locations
- 11 Fiber routing guides
- 12 Cabinet mounting “keyholes” (x2)
- 13 Internal and external ground lugs

## Compact (CFBT-HC), Expanded (CFBT-HX) and Ultra (CFBT-HU)

A compact, 48 subscribers CFBT-HC option includes 48 bulkhead adapters, two 1x32 splitter locations, and capacity for up to five hinged splice trays.

**CFBT-HC**  
 Dimensions: 18”H x 15”W x 7”D  
 Weight (empty): 15 lbs.



An expanded, 144 subscribers CFBT-HX option includes 144 bulkhead adapters, five 1x32 splitter locations, and capacity for up to 13 hinged splice trays.

**CFBT-HX**  
 Dimensions: 22”H x 22”W x 9.5”D  
 Weight (empty): 25 lbs.

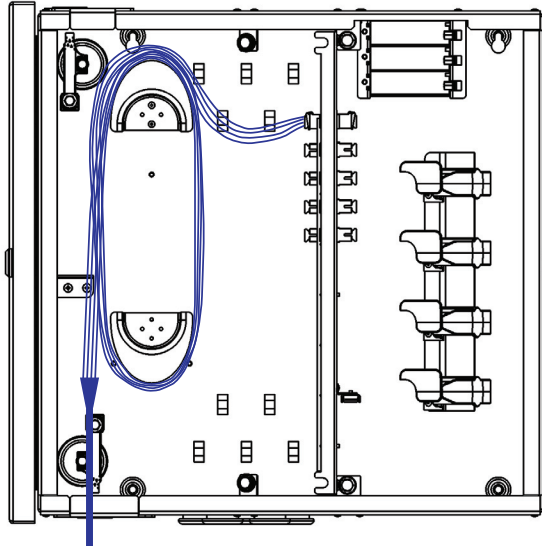


An ultra, 384 subscribers CFBT-HU option includes 384 patch plate bulkhead adapters, twelve 1x32 splitter locations, and capacity for up to 26 hinged splice trays.

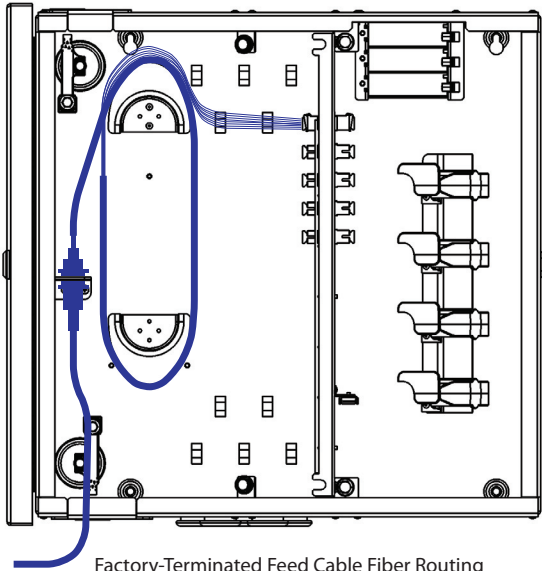
**CFBT-HU**  
 Dimensions: 41”H x 26”W x 10”D  
 Weight (empty): 40 lbs.



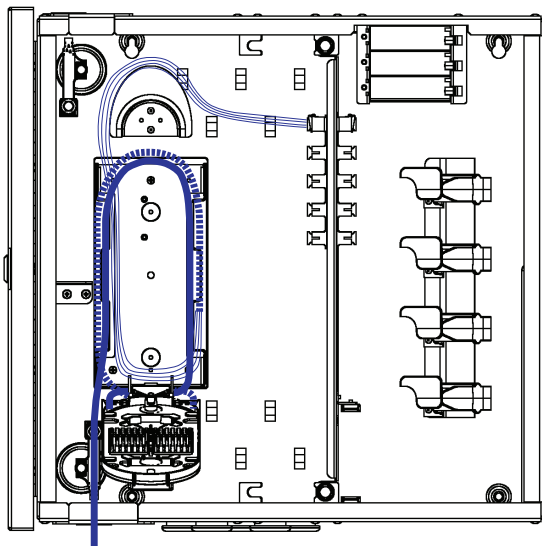
## Feed Cable Termination Options



Field-Terminated Feed Cable Fiber Routing

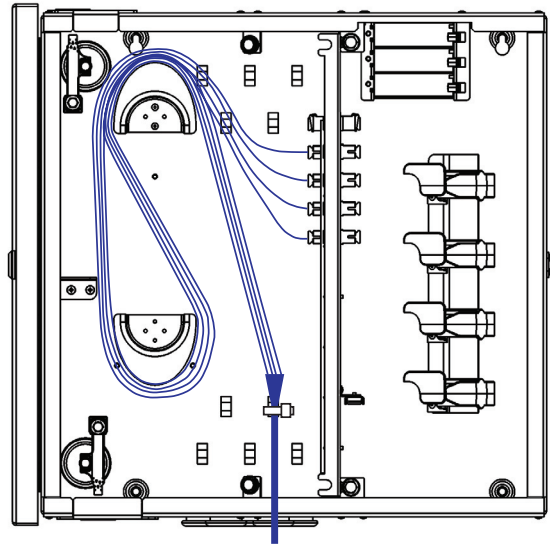


Factory-Terminated Feed Cable Fiber Routing

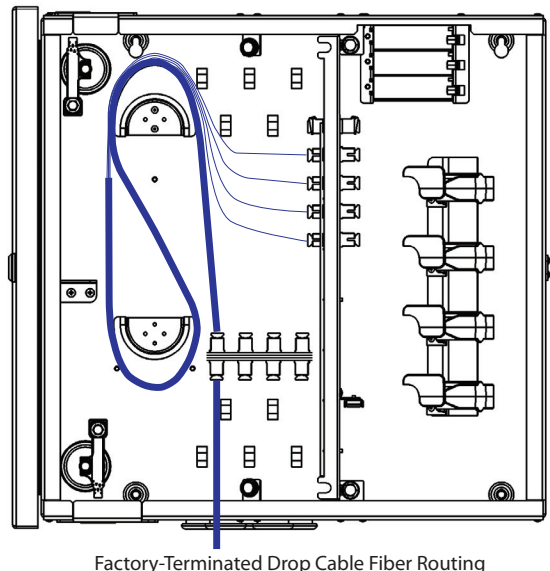


Spliced Feed Cable Fiber Routing

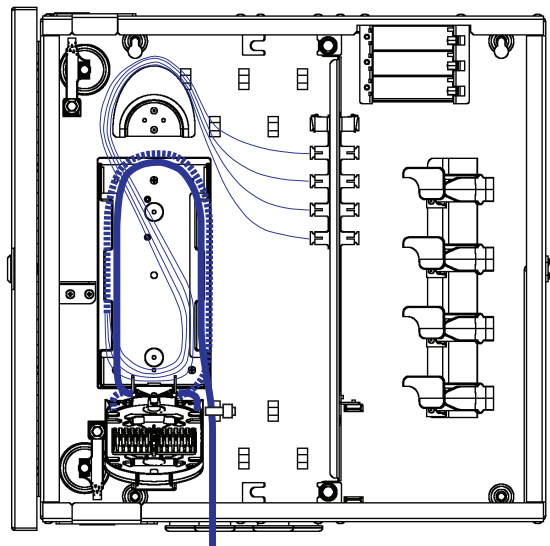
## Drop Cable Termination Options



Field-Terminated Drop Cable Fiber Routing



Factory-Terminated Drop Cable Fiber Routing



Spliced Distribution Cable Fiber Routing

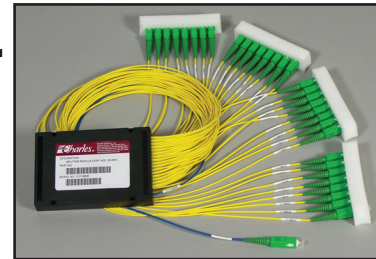
# CFBT-Hub Ordering Information

		(1) Cabinet Size	(2) Bulkhead Count	(3) Feed Fiber Mgmt.	(4) Drop Fiber Mgmt.	(5) Feed Fiber Quantity	(6) Feed Fiber Type	(7) Drop Fiber Quantity	(8) Drop Fiber Type	(9) Misc. Kits	
CFBT		-									
HC	Compact	00	0 Adptrs.	H	Hinged splice tray(s); (1 tray per 12 adapters)	0	None	0	None	0	None
HS	Standard	12	12 Adptrs.	S	Splice tray(s); (1 tray per 12 adapters)	1	12 Cnctrs.	P	2mm Jacketed Pigtailed	1	Padlock
HX	Expanded	24	24 Adptrs.	M	Multi-Fiber Hardened Connector	2	24 Cnctrs.	R	Ribbon Fanout (ribbon to 900 micron)	2	Heyco Fittings
HU	Ultra	48	48 Adptrs.	P	Multi-Fiber MPO Connector	4	48 Cnctrs.	L	Loose Tube Fanout (250 to 900 micron)		
		72	72 Adptrs.			7	72 Cnctrs.	M	MPO Fanout Assembly		
		96	96 Adptrs.			9	96 Cnctrs.	S	Stubbed Fiber Cable		
		1F	144 Adptrs.			F	144 Cnctrs.				
		2G	288 Adptrs.			G	288 Cnctrs.				
		2H	384 Adptrs.			H	384 Cnctrs.				

- NOTES:
- Maximum Subscriber Capacity: CFBT-HC = 48, CFBT-HS = 96, CFBT-HX = 144, CFBT-HU = 384 (1)
  - Stubbed fiber cable is offered in many types and lengths. Call for details (6)
  - Many Miscellaneous Kits are available per user specification. Call for details (9)

## Accessories

Ordering Number	Description
CFSM-FM1132AA	1 x 32 pre-connectorized (SC/APC) splitter module, 2mm jacketed pigtailed
97-CFBTBNDCTRL	CFBT upgrade kit for field terminating, includes bend radius control and hardware
97-SCA12LF3M	CFBT upgrade kit containing one 12 loose tube fiber fanout assembly, SC/APC connectors
97-SCA12RF3M	CFBT upgrade kit containing one 12 ribbon fiber fanout assembly, SC/APC connectors
97-ADPT12PNL	CFBT upgrade kit containing one 12 adapter panel, SC/APC adapters
97-FIBR24HTRAY	Charles hinged fiber splice tray, up to 24 fusion splices
97-FIBR24TRAY	Charles fiber splice tray, up to 24 fusion splices



**Charles 1x32 Passive Splitter Module (CFSM)**

- High quality
- Low insertion loss
- Bend insensitive jacketed fiber
- Right-sized drop length for better management



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- Field-proven and unequalled 24-hour technical support
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