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

216-tool hex-head quarter turn lock
Fiber identification label
Bend radius controls
Removable splice tray basket
Hinged splice trays (up to 9 tray capacity)
Feed cable grommet locations (x2)
Distribution cable grommet locations (x10)

Hinged bulkhead (locks in two positions)
Bulkhead adapters (9 rows @ 12 adapters)
Three 1x32 splitter locations
Fiber routing guides
Cabinet mounting "keyholes" (x2)
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-HX 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

<table>
<thead>
<tr>
<th>CFBT -</th>
<th>(1) Cabinet Size</th>
<th>(2) Bulkhead Count</th>
<th>(3) Feed Fiber Mgmt.</th>
<th>(4) Drop Fiber Mgmt.</th>
<th>(5) Feed Fiber Quantity</th>
<th>(6) Feed Fiber Type</th>
<th>(7) Drop Fiber Quantity</th>
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<th>(9) Misc. Kits</th>
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### Accessories

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<th>Ordering Number</th>
<th>Description</th>
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<tr>
<td>CFSM-FM1132AA</td>
<td>1 x 32 pre-connectorized (SC/APC) splitter module, 2mm jacketed pigtails</td>
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<tr>
<td>97-CFBTBNDCNTRL</td>
<td>CFBT upgrade kit for field terminating, includes bend radius control and hardware</td>
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<tr>
<td>97-SCA12LF3M</td>
<td>CFBT upgrade kit containing one 12 loose tube fiber fanout assembly, SC/APC connectors</td>
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<tr>
<td>97-SCA12RF3M</td>
<td>CFBT upgrade kit containing one 12 ribbon fiber fanout assembly, SC/APC connectors</td>
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<tr>
<td>97-ADPT12PNL</td>
<td>CFBT upgrade kit containing one 12 adapter panel, SC/APC adapters</td>
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<tr>
<td>97-FIBR24HTRAY</td>
<td>Charles hinged fiber splice tray, up to 24 fusion splices</td>
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<tr>
<td>97-FIBR24TRAY</td>
<td>Charles fiber splice tray, up to 24 fusion splices</td>
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### Charles 1x32 Passive Splitter Module (CFSM)
- High quality
- Low insertion loss
- Bend insensitive jacketed fiber
- Right-sized drop length for better management

### Dependable Solutions, Superior Support
- Field-proven and unequaled 24-hour technical support
- Individualized application consultation
- Superior quality (ISO 9001/TL 9000 registered)

Visit our website at [http://www.charlesindustries.com](http://www.charlesindustries.com)

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

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