

# Installation Instructions

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# FDC-W8-FAT-AE Fiber Access Terminal

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#### 1 General product information

The FDC-W8-FAT-AE is a butt style rubber sealed\* fiber optic closure with both splicing and patching capabilities, designed for Fiber Access point applications and can be deployed in all types of aerial applications.

The closure can accommodate up to 72 fusion splices and 8 SC adapters.

It also can house splitters and TAP's, either spliced or pre-connectorized.

Built-in rubber technology ensures the closures to meet all sealing requirements for the IP 65 rating and allows easy re-entry capability.

\*rubber seal size determined by drop cable diameter.

Main/branch cable range: 6 - 14 mm (0.24 - 0.55 inches)

Drop cable range: 3 and 5 mm or 2 x 3 mm flat (0.12 and 0.2 inches or 0.08 x 0.12 inches)

Outer dimensions: 285 x 237 x 76.5 mm (11.22 x 9.33 x 3 inches)

# 2 Product image



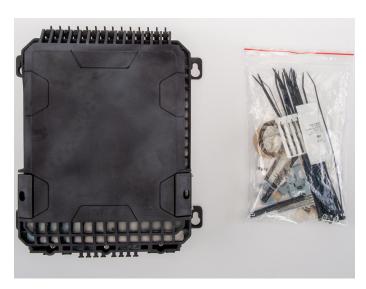
# **3 Warnings and Cautions**

- 3.1 Fiber optic cables may be damaged if bent or curved to a radius that is less than the recommended minimum bend radius. Always observe the recommended bend radius limit when installing fiber optic cables and patch cords.
- 3.2 Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not assume the laser power is turned off or that the fiber is disconnected at the other end.

#### 4 Installation conditions

The closure should be installed at a temperature between  $-5^{\circ}$ C and  $+45^{\circ}$ C.

#### 5 Kit content



# 6 Closure preparation



6.1 Open the 2 latches (use screwdriver).



6.2 Lift the organizer and install the splice holders (splice only version).

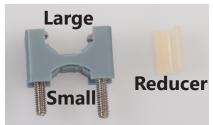


6.3 Install the 2 twist cable ties with the 2 screws at the correct position as shown.

# 7 Cable preparation / installation



7.1 Prepare the cable as standard practice, make a window cut of 1500 mm (59 inches), cut the strength member at 50 mm (2 inches) from the jacket end and put a wrap of foam at 80 mm (3.15 inches) (for cable ports 1 & 4) or at 65 mm (2.5 inches) (for cable ports 2 & 3) from the jacket end. Clean the surface of the cable jacket and the buffer tubes.

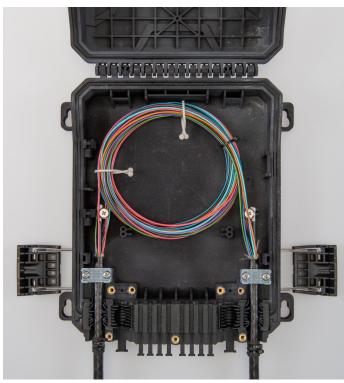


Cable	range	Cable clamp	Reducer	
mm	inches	Cable Clamp	Reducer	
6 - 9,3	0.24 - 0.36	Small	Yes	
9,4 - 12	0.37 - 0.47	Small	No	
12,1 - 14	0.48 - 0.55	Large	No	

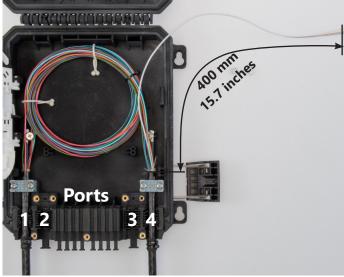
7.2 Depending on the cable diameter, the correct cable clamp orientation and reducer must be used.



7.3 If needed, Install the reducer as shown.



7.4 Install the cable with the 2 clamps and secure the strength member with the large head screw. Trim the excess strength member. Store the looped bundle with the 2 twist cable ties as shown. Secure the cable (with addition of foam) to the external T-shape with 2 cable ties.



7.5 Take out the determined tube from the bundle. For cables coming from port 3 & 4 strip the Loose Tube at approx 400 mm (15.7 inches) from the jacket end.

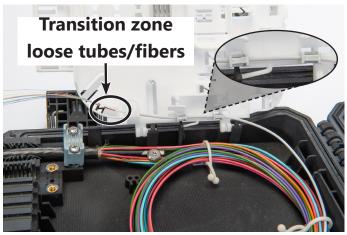
# **8** Fiber routing to organizer



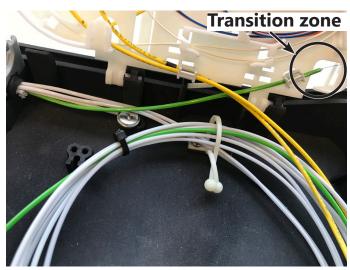
8.1 Slide 2 KTU's over the tube.



8.4 For splicing at the back of the tray, route the fibers as shown. Store fiber overlength in the top part of the organizer.



8.2 Install the KTU's in the slots as shown (KTU's can be stacked if needed).



8.3 For cables coming from port 1 strip the Loose Tube at 140 mm (5.5 inches) from the jacket end. For cables coming from port 2 strip the Loose Tube at 150 mm (5.9 inches) from the jacket end.





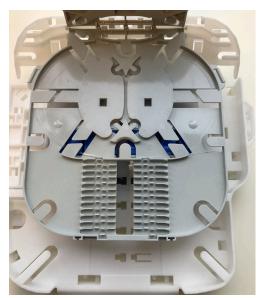
For splicing at the front trays route fibers as shown.

# 9 Pre-connectorized splitter / TAP 9.2 Drop connection

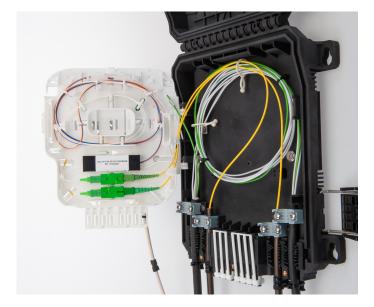
#### 9.1 Routing splitter / TAP



9.1.1 The feeder fiber from the splitter is stored in the first splice tray.



9.1.2 For splicing the feeder fiber follow the routing as shown.



9.2.1 Remove the dust cap (clean according to local practice) and insert the connectorized drop cable properly. Overlength can be stored as shown.

Secure the cable jacket internally and externally with addition of foam.

Install the dummy rods in the unused ports (clip on system for drops at the T-shapes).

Install the black dummy rods in the unused feeder ports. Secure them under the grey clamp and use a cable tie at the T-shapes

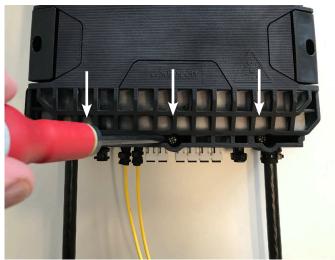
If access to the back of the organizer is required, unfasten only the external cable ties.

# 10 Closing the FDC



10.1 Before closing apply some grease to all cables and dummies.

**Note:** Make sure all dummies are in place.

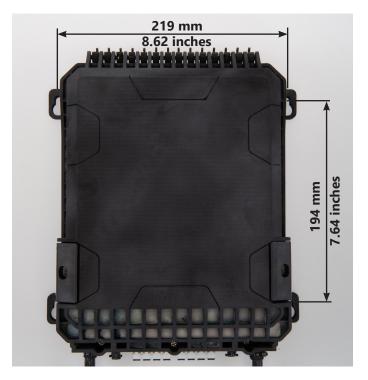


10.2 Close the 2 latches and tighten the 3 screws properly.

# 11 Aerial mounting options.

**Note:** Mounting accessories are not included in the kit.

#### 11.1 Holes dimensions



#### 11.2 Pole mounting



11.2.1 Insert 2 straps at the back of the FDC and mount to the pole.

#### 11.3 Strand mounting



# 12 Trademarks and patents

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This product may be covered by one or more U.S. patents or their foreign equivalents. For patents, see www.cs-pat.com.

#### 13 Contact information

Visit our website or contact your local CommScope representative for more information.

For technical assistance, customer service, or to report any missing/damaged parts, visit us at: http://www.commscope.com/SupportCenter