



Kymeta™ u8 Cable Replacement Instructions

SUPPORTED PRODUCTS: Kymeta™ Hawk™ u8 and Kymeta™ Goshawk™ u8 configurations

Document number: 700-00144-000 rev D

24 August, 2022

Table of contents

1	About this document	1
2	Field-replaceable cables	1
3	Before you begin	2
4	Remove the shroud	3
5	Install the field-replaceable cables	4
5.1	Hawk u8 ODU configuration	4
5.2	Hawk u8 and Goshawk u8 terminal configurations	5
5.3	Hawk u8 and Goshawk u8 GO configurations	6
6	Install the shroud	7
7	Verify system functionality	7
8	Customer support	8
9	Revision history	8
10	Copyright and trademark information	8

1 About this document

This document demonstrates all cable field-replaceable units (FRUs) for the Kymeta Hawk™ u8 (ODU, terminal, and GO configurations) and Kymeta Goshawk™ u8 (terminal and GO configurations).

2 Field-replaceable cables

Name and product code	Cable description	ODU	Terminal	GO
power jumper cable (W38C) (U8ACC-00017-0)	A DC power cable with three unterminated leads: a large red 4 AWG main power cable, a large black 4 AWG ground cable, and a small red 14 AWG ACC cable.	Yes	Yes	No
power jumper cable (W38B) (U8ACC-00042-0)	A DC power cable that can be connected to the AC-to-DC power kit (U8ACC-00002-0) or AC-to-DC power kit (U8ACC-00044-0). It overrides the remote power trigger (ACC) function.	No	No	Yes
power cable (W38D) (U8ACC-00056-0)	A 2.44 m (8 ft.) power cable used to transfer DC power by the AC-to-DC power kit (U8ACC-00044-0) to the u8. The W38D connects directly to the power main cable (W38A) and the AC-to-DC power kit (U8ACC-00044-0).	Yes	Yes	Yes
Ethernet jumper cable (W57) (U8ACC-00018-0)	An outdoor rated RJ 45 Ethernet jumper cable with a male connection on one end and a female connection on the other.	Yes	Yes	Yes
fan power and control cable (W47A) (U8ACC-00020-0)	A shielded Ethernet cable that provides power and control to the fan panel. This cable cannot be replaced with a standard Ethernet cable. Disconnect this cable at the connection halfway between the communication module and fan panel before removing the shroud entirely. The cable is attached to the fan panel cable (W47B).	Yes	Yes	Yes
BUC power, M&C cable (W44) (U8ACC-00019-0)	A cable that connects the communication module and BUC. This cable provides power to the BUC and communication to set attenuation, mute, and read output power.	Yes	Yes	Yes
RX LNB cable (W46) (U8ACC-00016-0)	An LMR-195 cable that connects the LNB to the antenna RX IN port. The cable requires a right-angle N-type connector at the antenna end to maintain the low profile of the antenna without sharp or protruding cable bends. The cable has standard N-type connectors at each end.	Yes	Yes	Yes

Name and product code	Cable description	ODU	Terminal	GO
TX cable (W43) (U8ACC-00029-0)	An LMR-195 cable that connects the BUC to the communications module's TX out port. The cable has standard N-type connectors at each end.	No	Yes	Yes
RX jumper cable (W58) (U8ACC-00022-0)	An extension LMR cable with a male right-angle connector for the antenna RX port on the communication module to a female N-type connector outside of the Hawk u8 ODU shroud. Connect this short cable to a longer coaxial cable connected to the RX port of your modem.	Yes	No	No
TX jumper cable (W59) (U8ACC-00021-0)	An extension LMR cable with a male N type connector for the BUC and a female N type connector outside of the Hawk u8 ODU shroud. Connect this short cable to a longer coaxial cable connected to the TX port of your modem.	Yes	No	No

3 Before you begin

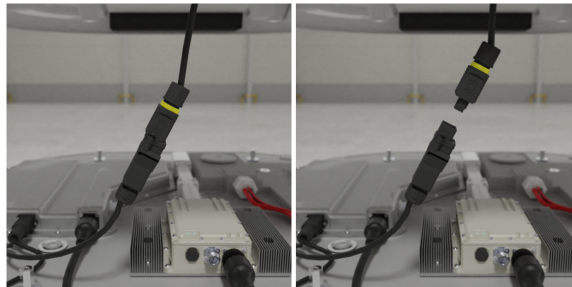
Before you install any components, refer to *Kymeta u8 products safety and handling guide (700-00122-000)* to familiarize yourself with the key steps to remember while installing the u8 components.

4 Remove the shroud


1. Disconnect power from the u8 and place it shroud-up on a soft surface to protect the radome.
2. Remove (8) M6 × 8 mm button head cap screws using the T20 Torx L-key or T30 Torx L-key.



3. Gently lift the shroud until the shroud fan cable connector is accessible.
4. Unlock the shroud fan cable connector by rotating the yellow ring counterclockwise to the unlock position, and then disconnect the shroud fan cable as shown below.



5. Fully remove the shroud and place it aside.

 The cable glands are not attached to the shroud and may move freely when the shroud is removed. This is an intentional ease of use feature. Take care not to misplace the cable glands.

5 Install the field-replaceable cables

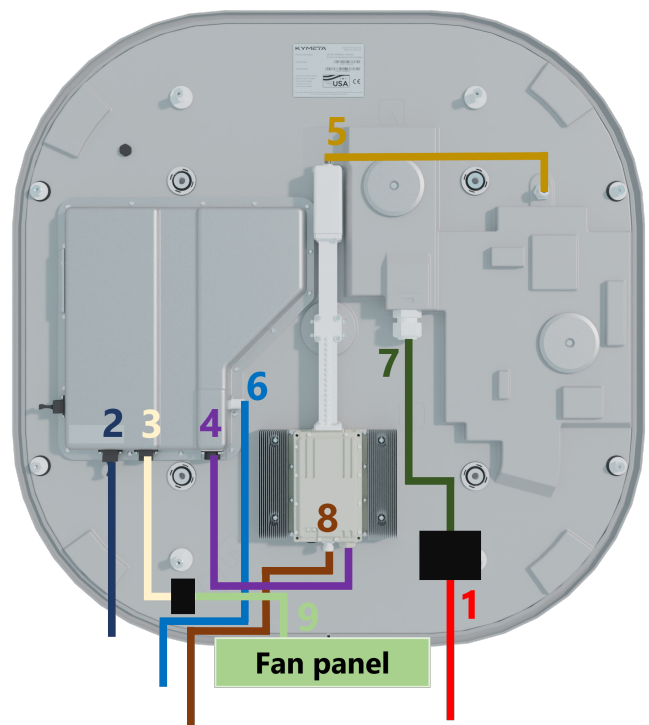
5.1 Hawk u8 ODU configuration

Seven field-replaceable external cables [1, 2, 3, 4, 5, 6, and 8] reside under the Hawk u8 ODU shroud. The power jumper cable (W38C) (U8ACC-00017-0) [1], Ethernet jumper cable (W57) (U8ACC-00018-0) [2], RX jumper cable (W58) (U8ACC-00022-0) [6], and TX jumper cable (W59) (U8ACC-00021-0) [8] move connection interfaces outside the shroud to improve installation experience.

- » The Hawk u8 ODU configuration ships with the power jumper cable (W38C) (U8ACC-00017-0) [1], but it can be replaced with the power jumper cable (W38B) (U8ACC-00042-0) or the power cable (W38D) (U8ACC-00056-0). These cables cannot be used at the same time.
- » The power main cable (W38A) [7] and fan panel cable (W47B) (U8ACC-00012-0) [9] are not replaceable.

The diagram below shows the default factory configuration.

1. Power jumper cable (W38C)
2. Ethernet jumper cable (W57)
3. Fan power and control jumper cable (W47A)
4. BUC power and M&C cable (W44)
5. RX LNB cable (W46)
6. RX jumper cable (W58)
7. Power main cable (W38A)
8. TX jumper cable (W59)
9. Fan panel cable (W47B)



🔧 When installing the RX jumper cable (W58) (U8ACC-00022-0) and TX jumper cable (W59) (U8ACC-00021-0), ensure the center pin of the cabled connector is aligned to the center pin receptacle on the communication module. Press the cabled connector onto the threaded communication module receptacle and hand-tighten the outer ring clockwise until the threads are engaged and the outer ring no longer spins. Ensure it is routed through the correct cable gland. Ensure the RX connector is not cross threaded and that it is secure.

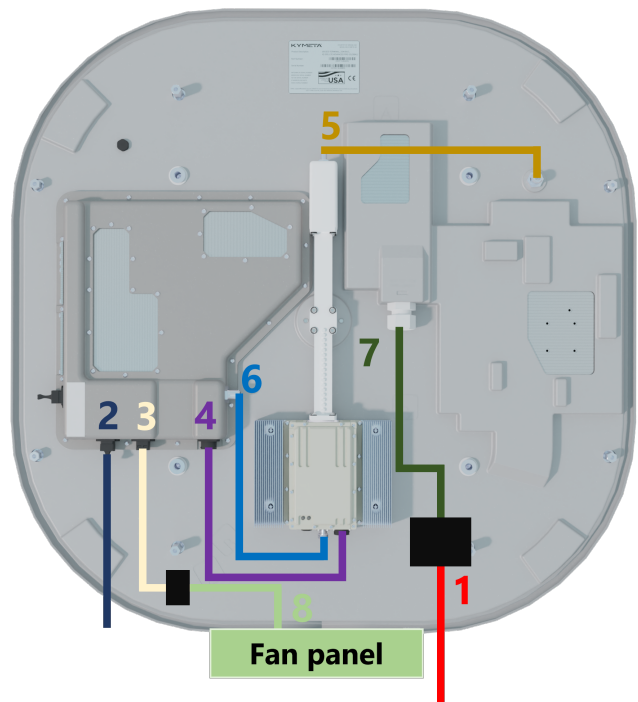
5.2 Hawk u8 and Goshawk u8 terminal configurations

Six field-replaceable external cables [1, 2, 3, 4, 5, and 6] reside under the Hawk u8 and Goshawk u8 terminal shroud. The power jumper cable (W38C) (U8ACC-00017-0) [1] and Ethernet jumper cable (W57) (U8ACC-00018-0) [2] move connection interfaces outside the shroud to improve installation experience.

- » The Hawk u8 and Goshawk u8 terminal configurations ship with the power jumper cable (W38C) (U8ACC-00017-0) [1], but it can be replaced with the power jumper cable (W38B) (U8ACC-00042-0) or the power cable (W38D) (U8ACC-00056-0). These cables cannot be used at the same time.
- » The power main cable (W38A) [7] and fan panel cable (W47B) (U8ACC-00012-0) [8] are not replaceable.

The diagram below shows the factory default configuration.

1. Power jumper cable (W38C)
2. Ethernet jumper cable (W57)
3. Fan power and control jumper cable (W47A)
4. BUC power and M&C cable (W44)
5. RX LNB cable (W46)
6. TX cable (W43)
7. Power main cable (W38A)
8. Fan panel cable (W47B)



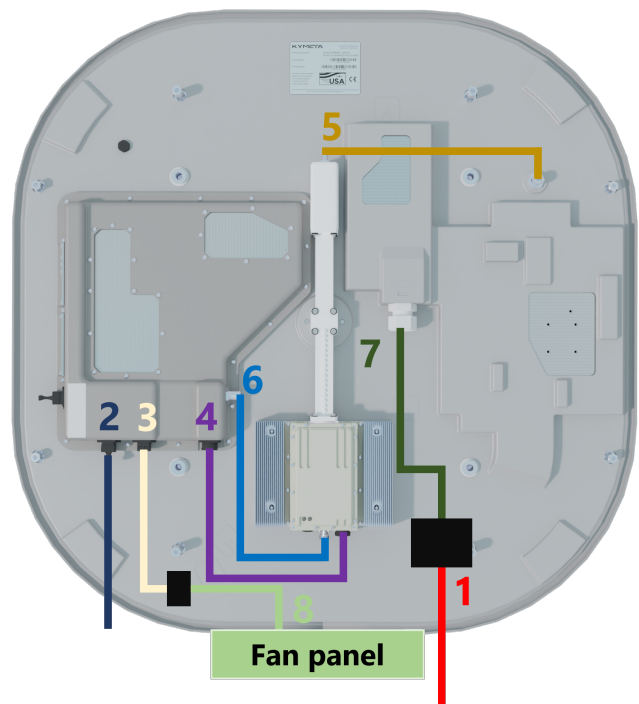
5.3 Hawk u8 and Goshawk u8 GO configurations

Six field-replaceable external cables [1, 2, 3, 4, 5, and 6] reside under the GO terminal shroud. The power jumper cable (W38B) (U8ACC-00042-0) [1] and Ethernet jumper cable (W57) (U8ACC-00018-0) [2] move connection interfaces outside the shroud to improve installation experience.

- » The Hawk u8 GO and Goshawk u8 GO configurations ship with the power jumper cable (W38B) (U8ACC-00042-0) [1], but it can be replaced with the power jumper cable (W38B) (U8ACC-00042-0) and the power cable (W38D) (U8ACC-00056-0). These cables cannot be used at the same time.
- » The power main cable (W38A) [7] and fan panel cable (W47B) (U8ACC-00012-0) [8] are not replaceable.

The diagram below shows the factory default configuration.

1. Power jumper cable (W38B)
2. Ethernet jumper cable (W57)
3. Fan power and control jumper cable (W47A)
4. BUC power and M&C cable (W44)
5. RX LNB cable (W46)
6. TX cable (W43)
7. Power main cable (W38A)
8. Fan panel cable (W47B)



6 Install the shroud

1. Reconnect the shroud fan cable. Align the yellow arrows on the cable connectors and then lock the connectors by rotating the yellow ring clockwise to the lock position.
2. Set the shroud in place and ensure external cables and cable glands are properly secured.
3. Ensure the mounting points are clear and cables under the shroud are not pinched. Ensure the metal compression limiter is aligned with the mounting point threads as shown below.



4. Ensure the shroud rests evenly on the beltline.
5. Install (8) M6 × 8 mm button head cap screws provided in the kit using a T30 Torx L-key and torque to 2.8 N-m (25 in.-lb.). These screws have a nylon patch, so Loctite 242 is not required.

7 Verify system functionality

1. Reconnect the power connections and power on the u8 product.
2. Access the antenna's web-based UI as described in *Kymeta u8 antenna software user guide (700-00139-000)*.
3. If you are using antenna software version 2.1.0 or later, navigate to the **State of Health** tab > **Power-On Self Test** window.

If you are using antenna software version 2.0.1 or earlier, navigate to the **State of Health** tab > **Built-In Self Test** window, and then click **Run Built-In Self Test**.

STATUS STATE OF HEALTH POINTING SETTINGS HELP			
Power-On Self Test Built-In Self Test System Logs Diagnostics			
Built-In Self Test			
Run Built-In Self Test Save Results			
ACU SERIAL NUMBER	STATUS	START TIME	STOP TIME
ACU_SN	PASS	2021-02-16 20:57:01 UTC	2021-02-16 20:57:03 UTC
BIST TESTS		FAILURES	STATUS
▶ ApertureConfig		0	✓
▶ BucInfo		0	✓
▶ EucFileCheck		0	✓
▶ FPGA		0	✓
▶ Gamma		0	✓
▶ Heater		0	✓
▶ HWSensors		0	✓
▶ InterfaceBoard		0	✓
▼ LnbInfo		0	✓
LnbOperation			✓

8 Customer support

Contact Kymeta customer support at support@kymetacorp.com or call Kymeta **1-855-525-6638** for urgent issues.

9 Revision history

Revision	Change
A	Initial version.
B	Product updates.
C	Added shroud removal and installation instructions. Updated cable descriptions.
D	Added U8ACC-00056. Updated cable diagrams.

10 Copyright and trademark information

©2022 Kymeta Corporation. All Rights Reserved. KYMETA, HAWK, GOSHAWK, OSPREY, KYMETA CONNECT, MAKING MOBILE GLOBAL, and CONNECTED BY KYMETA are trademarks of Kymeta Corporation, with registrations or pending applications in the U.S. and/or other countries. All other trademarks are the property of their respective owners.