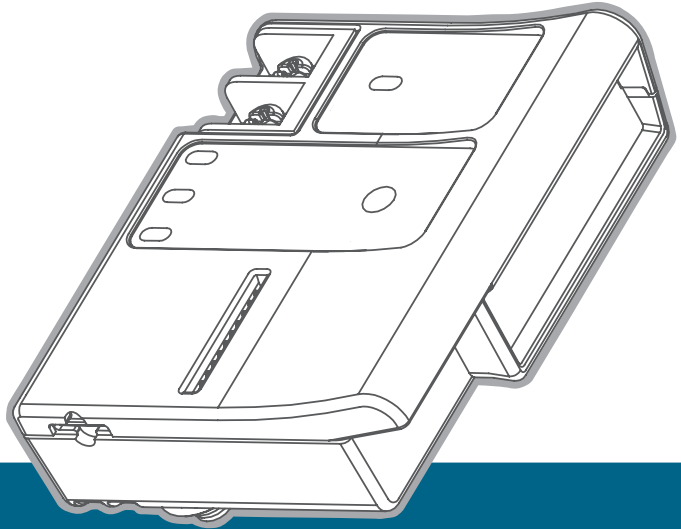


CELL-KIT

INSTALLATION GUIDE



Cellular Communication Module
for Hunter ICC2 Controllers

Hunter[®]

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The Cellular Communication Module is used to connect ICC2 Controllers to Hunter's Centralus Irrigation Management Platform. This 4G LTE communication module allows for wide area connectivity to Centralus cloud-based control and provides an alternative to Wi-Fi and Ethernet connections to the internet.

A Hunter Centralus account is required to complete controller setup and configuration in the software. Visit centralus.hunterindustries.com to set up a free account.

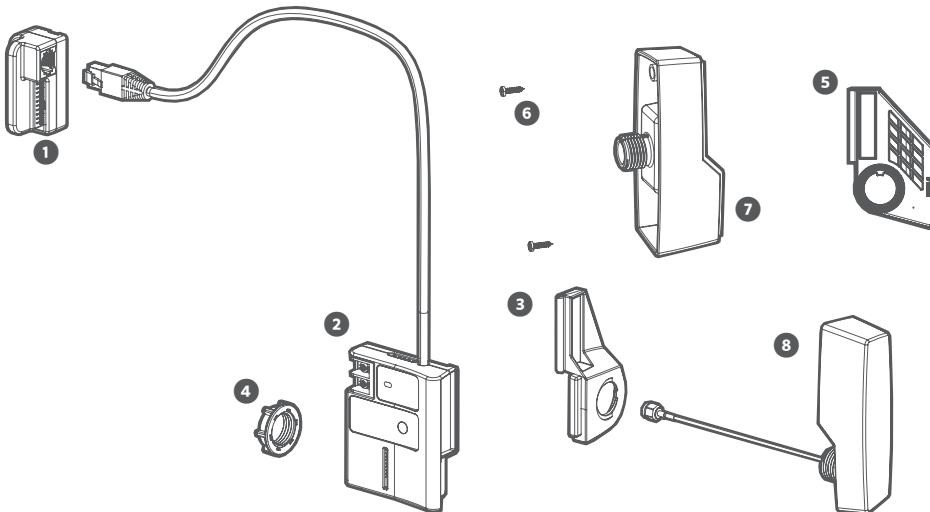


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Kit Contents

The Cellular Communication Module includes all necessary hardware for plastic, metal, and pedestal ICC2 Controller installations.

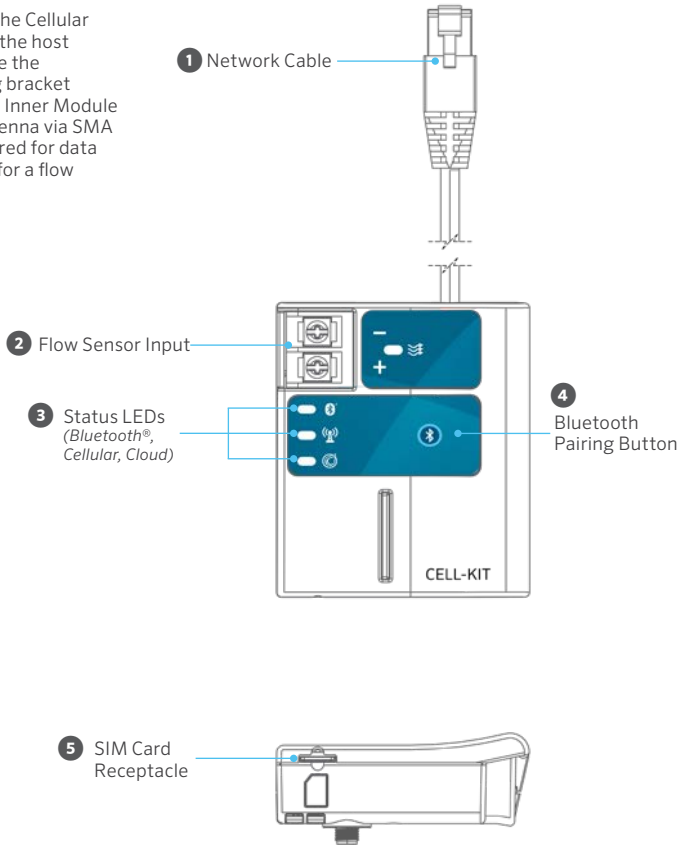
- | | |
|---|--|
| 1 | SyncPort Adapter |
| 2 | Inner Module (SIM card included for activation in North America) |
| 3 | Inner Module Mounting Bracket for Plastic ICC2 Cabinets |
| 4 | Shank Nut |
| 5 | Inner Module Mounting Bracket for Metal ICC2 Cabinets |
| 6 | Screws (M2.6 x 12 mm; qty. 2) |
| 7 | External Antenna Adapter for Metal ICC2 Cabinets |
| 8 | Antenna Housing |



Components

Inner Module

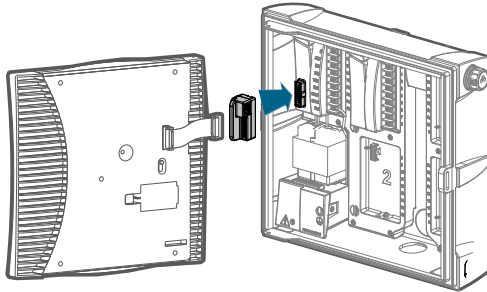
The Inner Module is the main component of the Cellular Communication Module Kit. It is powered by the host ICC2 Controller and is installed securely inside the controller enclosure. The magnetic mounting bracket allows for quick installation and removal. The Inner Module connects to an exterior-mounted cellular antenna via SMA connection. It also houses the SIM card required for data activation and provides two screw terminals for a flow sensor input.



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SyncPort Adapter Installation

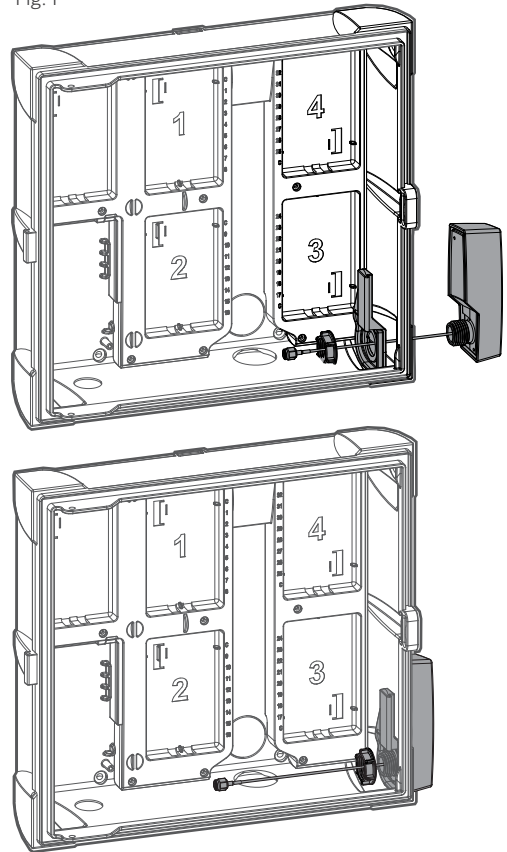
1. Turn off AC power to the controller.
2. Disconnect the facepack ribbon cable from the Power Module in the upper left corner of the controller.
3. Install the SyncPort Adapter onto the Power Module plug.
4. Plug the facepack ribbon cable into the SyncPort Adapter.



Antenna Installation

1. For plastic ICC2 Controller installations, remove the conduit knockout on the lower right side of the controller cabinet (e.g., Fig.1). For metal ICC2 Controller installations, remove the rubber plug on the right side of the enclosure.
2. The Antenna Housing mounts to the exterior of the controller enclosure. Route the coaxial cable through the knockout opening and into the controller enclosure (e.g., Fig.1).
3. To secure the Antenna to the cabinet, install the Inner Module Mounting Bracket (for plastic ICC2 Controller installations) over the Antenna Housing thread body and cable, and hand tighten the shank nut to hold both parts in place.

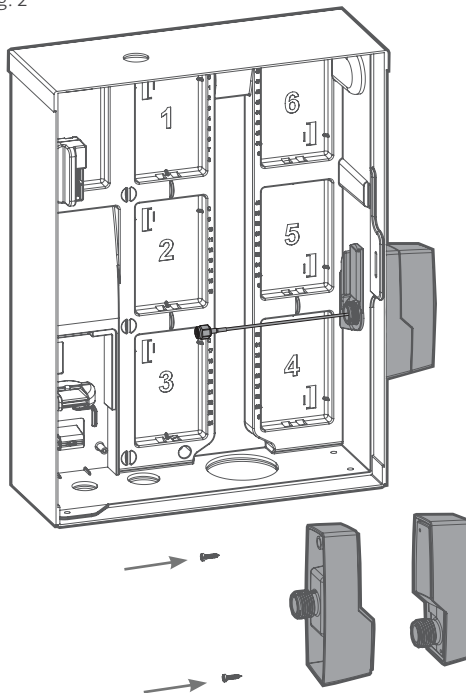
Fig. 1



Antenna Installation (cont.)

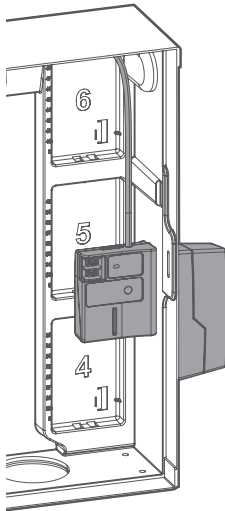
4. For metal ICC2 Controller installations, combine the Antenna Housing with the External Antenna Adapter (component #7). Feed the coaxial cable through the Adapter and screw the housings together (see Fig. 2).
5. Secure the Antenna Housing to the Controller using the shank nut and Mounting Bracket for Metal Cabinets.

Fig. 2

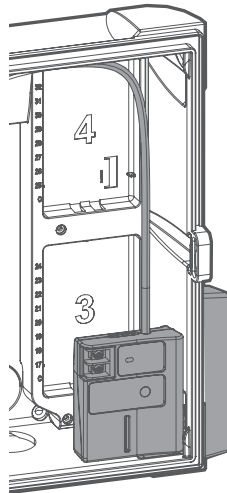


Inner Module Installation

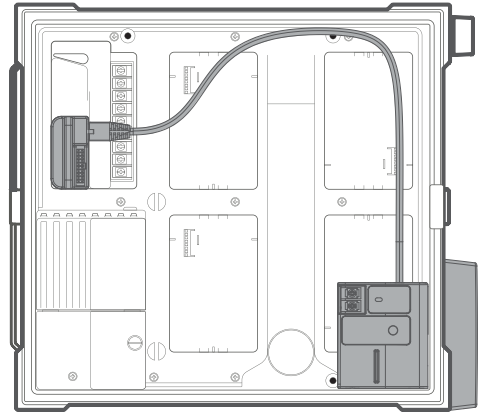
1. With the Antenna Housing and Mounting Bracket installed, connect the Inner Module.
2. Thread the coaxial cable from the Antenna onto the SMA connector on the back of the Inner Module.
3. The Inner Module snaps into place on the Mounting Brackets via magnets.
4. Connect the network cable Cat 5/6 plug coming from the top of the Inner Module to the SyncPort Adapter.
5. Restore power to the controller to initialize the Cellular Communication Module.



Metal Cabinet



Plastic Cabinet



How to Complete Your Setup



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Once the Cellular Communication Module is installed in an ICC2 Controller and powered on, it is ready for connection to the internet. **To complete the setup, you must activate a cellular data subscription and add the controller to the Centralus Platform.** Scan the QR Code above for additional step-by-step instructions.

The Hunter CELLKIT App is required to complete the connection to local cellular networks. Download the free CELLKIT App from the Apple App Store or Google Play.



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Product Specifications

Cellular Communication Module power supply: 24 VAC from host ICC2 Controller

Cellular connection: LTE-M (Cat-M1); NB-IoT

Cellular modem carrier approvals:

- AT&T End-Device Certified (LTE-M)
- Verizon End-Device Certified (LTE-M)
- Bell End-Device Certified (LTE-M)
- Telus End-Device Certified (LTE-M)
- Compatible with other carriers offering LTE-M/NB-IoT services

Cellular bands supported:

- 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 28, and 39

Compliance

FCC:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Hunter Industries could void the user's authority to operate this device. If necessary, consult a representative of Hunter Industries Inc. or an experienced radio/television technician for additional suggestions.

To satisfy FCC and ISED RF Exposure requirements for mobile and base station transmission devices, a separation distance of 10" (25 cm) or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Compliance

ISED:

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage, et l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 25cm between the radiator and your body.

IFETEL:

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Este equipo ha sido diseñado para operar con las antenas que enseguida se enlista y para una ganancia máxima de antena Gx dBi. El uso con este equipo de antenas no incluidas en esta lista o que tengan una ganancia mayor que Gx dBi quedan prohibidas. La impedancia requerida de la antena es de Zy ohms.

Certificate of Conformity to European Directives

Hereby, Hunter Industries declares that the radio equipment type CELL-KIT is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

<http://subsite.hunterindustries.com/compliance/>



Bluetooth maximum output power:

- Frequency band (MHz): ISM 2.4 – 2.4835
- Maximum power (mW): 6.31

Cellular maximum output power:

Frequency band (MHz): LTE 700, 800, 850, 900, 1700, 1800, 1900, and 2100

- Maximum power (mW): 199.5



