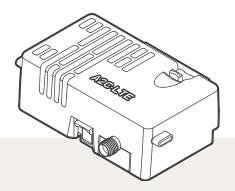
# A2C-LTE AND A2C-CELL-E



### Installation Guide

Cellular Communication Modules for Hunter ACC2 Controllers



#### **PREPARATION**

The A2C-LTE cellular communication module is designed for use in North America. The A2C-CELL-E cellular communication module is designed for use in other parts of the world. Each module includes a pre-registered SIM card for use in Hunter controllers only. The card will not work in other devices.

This SIM card requires a service plan. The controller setup process will include simple steps for entering secure billing and payment information.

If your organization requires you to use a different plan or account, the SIM card must be replaced with one supplied by your organization. You will be required to enter the Access Point Name (APN) used by your organization in the controller setup screens.

The original ACC2 facepack could not support a cellular module. If the controller detects an incompatible cell module, a warning message will appear in the controller display, as shown at right.



If the module will be used to connect the controller to the internet, a Hunter Centralus™ account is required to complete final controller configuration in the software application. Visit centralus.hunterindustries.com to set up a free Hunter account in advance, so your installation can be completed and tested.

### Network Info

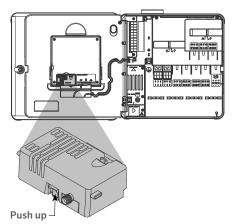
Facepack Replacement Needed Contact Hunter® Distributor

#### INSTALLATION

Turn off the controller power using the power switch on the transformer.

#### **Module Installation**

Remove the dust cover, or existing module, from the bottom rear of the controller facepack. Push up on the spring-loaded button and pull downward to remove.

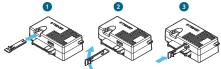


Slide in the new module until the lock clicks.

#### **SIM Card Replacement**

The module includes a tool for SIM card removal or installation. This tool is normally only used when changing from the Hunter-supplied SIM to a local SIM

- Remove the tool from the receptacle on the module
- Insert it in the SIM card slot (domestic and international SIM slots are in slightly different locations). Gently press on the SIM with the tool and release. The SIM will eject partially. The tool can also be used to remove the SIM card if necessary.
- Before inserting a new SIM, verify the correct orientation of the SIM as indicated by the icon on the product. Load the SIM card into the tool and push it gently into the slot until it clicks into place.



#### Antenna Installation

Plastic controllers: Carefully drill a ½" (13 mm) hole in the top of the plastic wall mount, where indicated by the printed circle on top of the controller. Remove all plastic debris left behind after drilling.

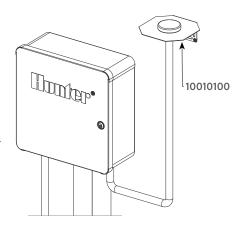
Remove the nut from the antenna assembly. Route the antenna cable through the hole and the nut. Apply RTV sealant around the hole, filling the gap between the enclosure hole and the mounting threads. Tighten the nut securely.

Route the antenna cable through the track on the back of the doorframe to the module in the facepack. Leave just enough slack to allow the door to open and close without pinching the cable.

Connect the cable to the module and tighten by hand.

Existing metal enclosures: The antenna must be installed outside the controller enclosure on a metal bracket. Do not drill the enclosure directly.

These installations require a Hunter model 10010100 wall bracket to complete the installation.



The antenna includes approximately 9' (2.8 m) of cable. Choose a bracket mounting location that will allow the antenna cable to be routed through conduit to the openings in the bottom of the controller, and then through the track on the doorframe to the cellular module.

Mount the bracket as high as possible to the wall with mounting hardware appropriate for the mounting surface.

Route the antenna cable through the hole in the bracket. Install the antenna on the bracket with the nut. Tighten the nut securely.

Route the cable from the bracket through conduit down, over, and into the controller enclosure via the conduit holes in the bottom of the enclosure.

Route the antenna cable through the track on the back of the doorframe to the module in the facepack. Leave just enough slack to allow the door to open and close without pinching the cable.

Connect the cable to the module and tighten by hand.

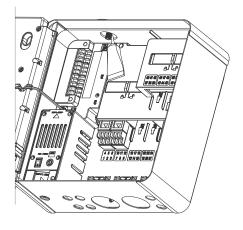
Future metal controllers (available late 2020): Metal controllers will include a hole plug assembly in a pre-drilled factory hole on top of the controller. Remove the nut on the inside of the controller to remove the plug.

Route the cable through the pre-drilled hole and the antenna nut. Then tighten the nut on the antenna securely.

Apply RTV sealant around the hole, filling the gap between the enclosure hole and the mounting threads.

Route the antenna cable through the track on the back of the door frame to the module in the facepack. Leave just enough slack to allow the door to open and close without pinching the cable.

Connect the cable to the module and tighten by hand.



**Plastic pedestal:** Plastic pedestal mounting requires a Hunter model 10010000 plastic pedestal lid adapter.

Route the antenna cable through the hole in the bracket. Secure the antenna to the mounting bracket with the supplied nut.

Use the included screws to install the bracket so the antenna protrudes into the recess in the pedestal lid, as shown.

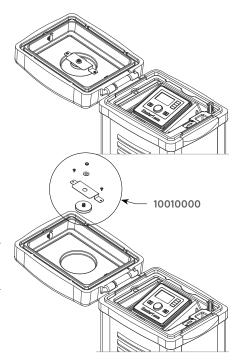
Install the plastic cable guides as shown to secure the antenna cable and prevent it from pinching the cable when the lid is closed.

Route the cable down the hole to the side of the facepack frame. Connect it to the connector on the LTE module.



Do not allow any metal portion of the antenna cable to touch metal or earth ground with the power on.

Turn on the controller power. After the controller reboots, the networking icon should appear on the bottom of the Home screen.



The status icon will appear red until the module is connected to a cellular service. It should connect automatically within a few minutes, if a qualifying cell tower is within range. The connected icon will appear green.

The physical installation is now complete.



Centralus software setup and cellular billing subscription should be completed within seven days of module connection.

The following section describes how to set up the cellular service and add the controller to Centralus software. This process should be completed by the controller owner, who will need to enter billing and payment information for the cellular data service.



#### CONFIGURATION AND CONNECTION

Press the Main Menu button, and turn the dial to the Settings menu. Push the dial to select.

Dial down to the Networking selection and select it by clicking in the dial.



The Networking screen will display information about the cell module, including connection status and the device's serial number.

Access Point Name (APN): The access point name tells the module where to connect for data purposes.

- zipitwireless.com.attz will be pre-selected for most users in North America.
- International users should press the Edit APN soft key and select aws.inetd.gdsp from the menu that appears.



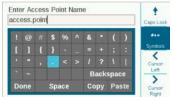
If you plan to use these recommended Hunter data services, you may skip the next section and proceed directly to Software Setup.

Using a different service provider: Customers who plan to use their own service and SIM card will need to change the SIM card (see the Installation section for SIM insertion), and then change the APN to the service that the organization's cell provider specifies.

Press the soft key to Edit APN. A list of APN options will appear. Use the dial to scroll down to Manual Entry and click the dial to select it.



The keyboard entry screen will appear. Use the keyboard to enter the APN exactly as specified by your organization. Press the Symbols soft key to find periods, slashes, and other punctuation marks as needed.



When the new APN is complete, review it to make sure the information is correct. Turn the dial to Done on the keyboard, and select it.

The screen will return to the Network Info page, and show the new APN. The module is now ready to connect in the software.



Use an internet-connected computer or mobile device to go to **centralus.hunterindustries.com**.

#### **SOFTWARE SETUP**

To add the controller to Centralus, go to your Centralus account. You must have a free Hunter account to add a controller.

From the Main Menu icon in the software, select Add Controller

Type a name for the controller, and the 10-digit serial number from the A2C-LTE or A2C-CELL-E module

The serial number is printed on the module, and is also visible on the controller's Network Info screen. Enter all zeroes that are included in the serial number and click Next.

Enter a valid address for the controller location, and choose the connection type. You must select "Cellular" or you will be unable to complete the setup successfully.

The setup process will continue to the billing and activation screen via Hunter's secure, third-party cellular service provider. You will return to the setup process when this step is complete.









Follow the on-screen instructions to set up billing and payment. When the billing process is complete, click to continue with controller setup.

Enter the controller address. The address must be a valid address in Google Maps™ to be accepted. Press Next.

The controller will now be sent a Controller Verification Code for security purposes.



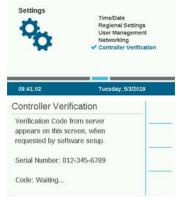


Google Maps is a trademark of Google LLC.

#### FIRMWARE VERIFICATION

Go to the controller menu for Settings, and select Controller Verification. You must select the Controller Verification screen before pressing Next, or the code will not be sent (the software must detect the correct screen in the display before sending the code).

Enter the code number that appears on the Controller Verification screen into the software setup screen.



If the Verification Code is correct, the controller will be added to the software and the map.

The networking icon on the Home screen of the controller should now have a green status icon.

#### **TROUBLESHOOTING**

#### Signal Strength

The maximum signal strength value is -51 dBm. The signal strength is shown in the upper-right corner of the Networking screen. The closer the number is to zero, the better the signal.

Generally, a signal of -85 dBm is adequate for reliable communications. Readings of -99 dBm or higher will be unreliable. Signal strength can be improved by elevating the antenna location with an external bracket (504494), and/or by ensuring that the antenna is not shielded by heavy metal objects or excessive foliage.

For complete setup information, scan the QR code or visit **hunterindustries.com**.





#### COMPLIANCE AND APPROVALS

Hunter Industries hereby declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU (Radio Equipment Directive).

#### FCC Notice

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. 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. Operation is subject to the following two conditions:

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

The FCC regulations provide that changes or modifications not expressly approved by Hunter Industries could void your authority to operate this equipment. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. this device may not cause interference, and
- 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.

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 RF Exposure requirements for mobile and base station transmission devices, a separation distance of 8" (20 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.

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RC-004-IG-A2CLTE EN 5/20

## Innovation, Science and Economic Development Canada (ISED) Compliance Notice

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:

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

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

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.

#### Certificate of Conformity to European Directives



Hunter Industries declares that the irrigation controller complies with the standards of the European Directives of "electromagnetic compatibility" (2014/30/EU), "low voltage" (2014/35/EU) and "radio equipment" (2014/53/EU).



This symbol means the product must not be discarded as household waste and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling help protect natural resources, human health, and the environment. For more information on disposal and recycling of this product,

contact your local municipality, disposal service, or the shop where you bought this product.