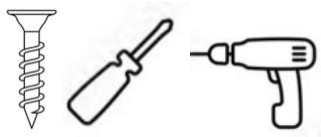


# BINCLOUD GATEWAY

BCGW.100.02XXS (2 outputs)  
BCGW.100.04XXS (4 outputs)

927-0317 | Cellular-NCR-WL-20-BCGW.100.XXXXC



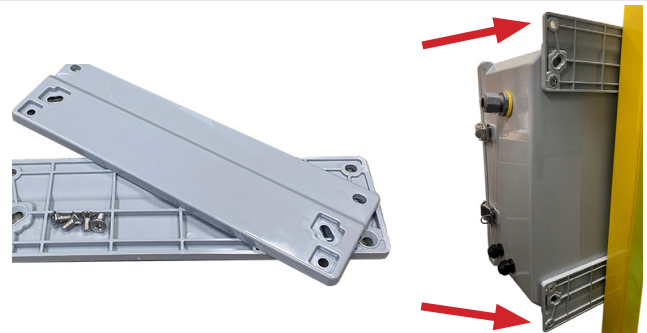
Tools needed: drill and bit, phillips and regular screwdriver. Enclosed bolts and screws.

## STEP 1

Choose a location for a wall-mount or pole mount to install your Gateway. In the northern hemisphere, the general rule is to point the panel true south. In the southern hemisphere, point true north. Consider structures, trees, etc. that may cast shadows.

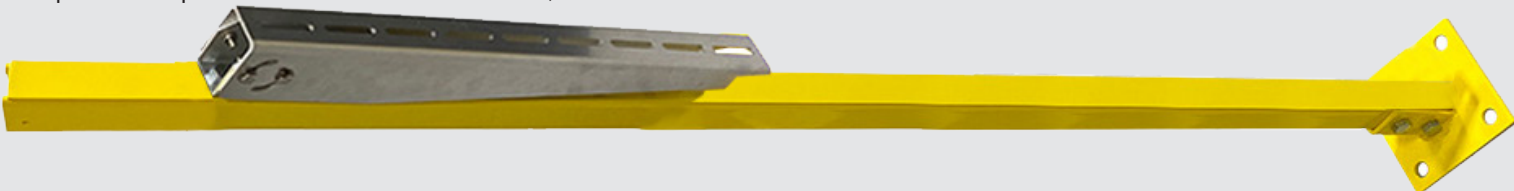
## STEP 2

Attach gray mount brackets to the Gateway enclosure with included screws.



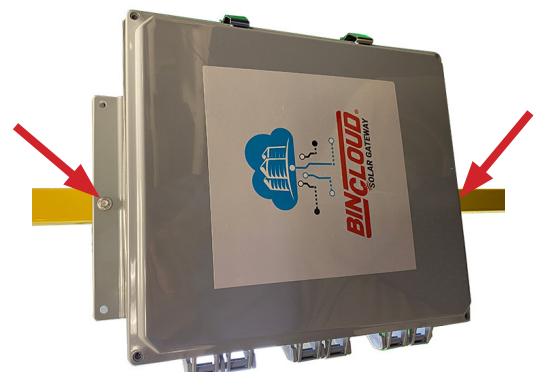
## STEP 3

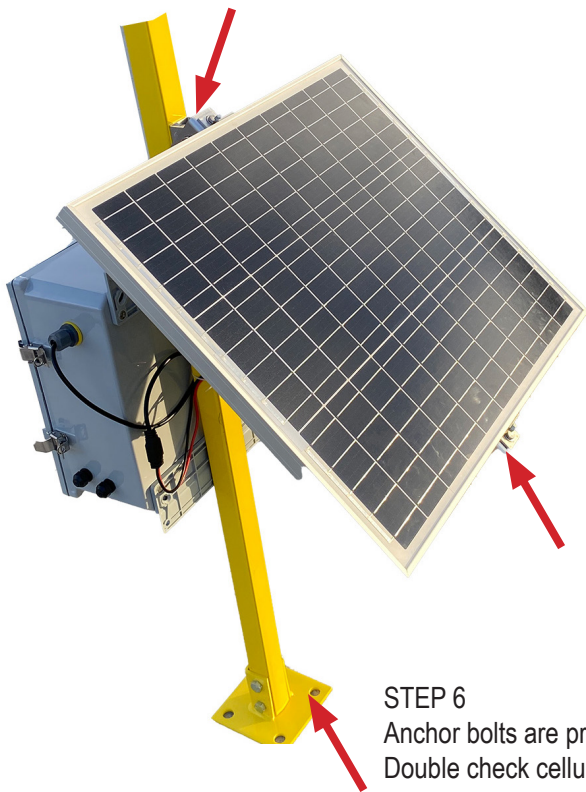
Prepare the pole. Plan where the Gateway (gray box) and solar panel will be installed on the pole. Consider length of wires between the Gateway and solar panel. Consider access to the sun/shadows. The mount bracket (stainless) holds the solar panel. To reposition the stainless steel bracket, loosen bolts and drill new holes.



## STEP 4

The pole includes a hardware kit with self-driving screws. To attach the Gateway box to the pole, drill a hole on both ends (through the attached gray brackets) and mark the yellow pole. Double check placement and ask will the solar panel wires reach the Gateway wires. Drill a pilot hole on marks. Screw BinCloud to the pole.





**STEP 5**

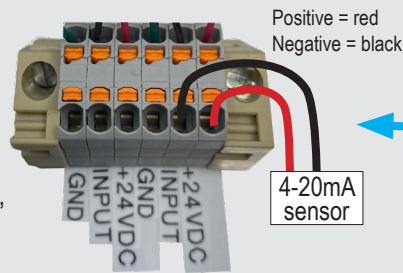
Attach the solar panel to the pole. Find panel center and place upon the stainless bracket on the pole. Use the self-taping screws but be careful to tap the screw straight avoiding an angle that would pierce the solar electronics. Sawhorses or two tables will make this easier.

**STEP 6**

Anchor bolts are provided to install the bottom plate to a base. Double check cellular reception, direction of sun, etc. before final installation.

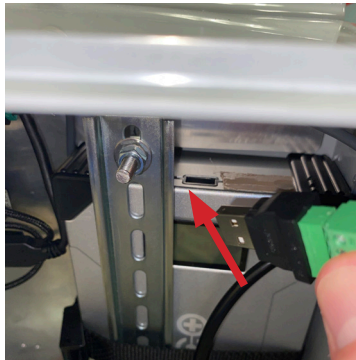
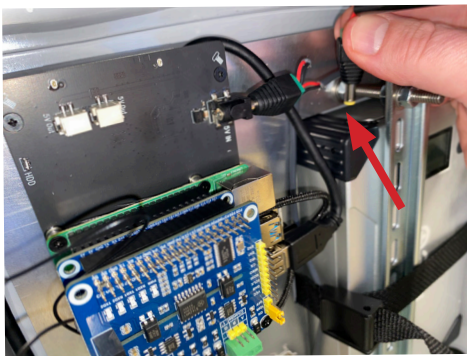
**STEP 7**

Find the 4-20mA adapter terminal.  
 Pull sensor wire into the Gateway enclosure through provided inlets.  
 Connect the positive sensor wire to the terminal labeled "+24VDC"  
 Connect the negative sensor wire to the terminal block labeled "INPUT."



**STEP 8 AWAKEN YOUR GATEWAY!**

One plug and one USB connection are can be found in the Gateway. The inputs can be found on the side of the lithium battery. Put the plug into the plug jack on the battery. USB into the USB port on the battery. A cellular antenna simply screws on the outside of the Gateway.



**CONFIRM!**

Sensors, solar, Gateway all seem good? Wait 25 minutes and call BinMaster at 1-800-278-4241 to confirm the internet connection. BinMaster will create a custom cloud page using measurements from your bins, tanks, silos, etc. Check the worksheet on following pages so you can prepare for this conversation.

## FIREWALL RULES FOR BINCLOUD GATEWAY

Direction Outbound	Ports	For these IPS	IP Addresses
TCP	80, 433		All
UDP	5959-5961		52.38.107.102
			52.25.64.249
			34.221.219.221
			54.218.6.237
UDP	5959-5970		52.39.255.60
			54.71.174.229, 52.88.4.160, 34.217.159.41, 34.213.84.184, 52.43.176.61, 35.162.54.59, 52.42.122.172, 44.224.165.129, 44.226.176.44, 44.237.66.197, 44.238.4.218, 54.184.44.101, 44.228.115.25, 44.230.239.2, 44.236.20.68, 44.236.200.9, 44.236.76.190, 44.239.243.92, 44.240.35.27

Direction Outbound	Ports	Region	IP Addresses
UDP	20000-40000	USA	All
UDP			54.212.116.92
UDP			52.12.114.120
UDP			52.87.228.243
UDP			3.88.21.119
UDP			34.223.7.202
UDP		Europe	54.93.100.223
UDP			18.195.88.21
UDP			18.184.70.5
UDP		India	15.207.116.15
UDP			13.127.230.228
UDP		SE Asia	13.212.70.205
UDP			13.212.30.222
UDP		Asia	18.182.42.125
UDP			13.230.250.171
UDP			18.179.34.24
UDP		Japan	52.69.206.76
UDP			18.179.57.238

## Measuring a Vessel | Get Ready for BinCloud

In order to calculate material from level readings, we set up BinCloud software with your vessel dimensions. Bins, silos, and tanks vary greatly, so you'll need to provide physical measurements to BinMaster. Here's a handy guide to prepare for the BinMaster call:

Vessel Manufacturer \_\_\_\_\_ Model # \_\_\_\_\_ Other ID # \_\_\_\_\_  
(if available from paperwork or plate on vessel)

Straight Wall Height: \_\_\_\_\_

Top Cone Height: \_\_\_\_\_

Sensors 4-20mA

Diameter\*: \_\_\_\_\_

Bottom Cone Height: \_\_\_\_\_

4mA Distance Setting (empty): \_\_\_\_\_

Width\*: \_\_\_\_\_

Bottom Opening: width: \_\_\_\_\_ length: \_\_\_\_\_

20mA Distance Setting (full): \_\_\_\_\_

Length\*: \_\_\_\_\_

Top Opening: width: \_\_\_\_\_ length: \_\_\_\_\_

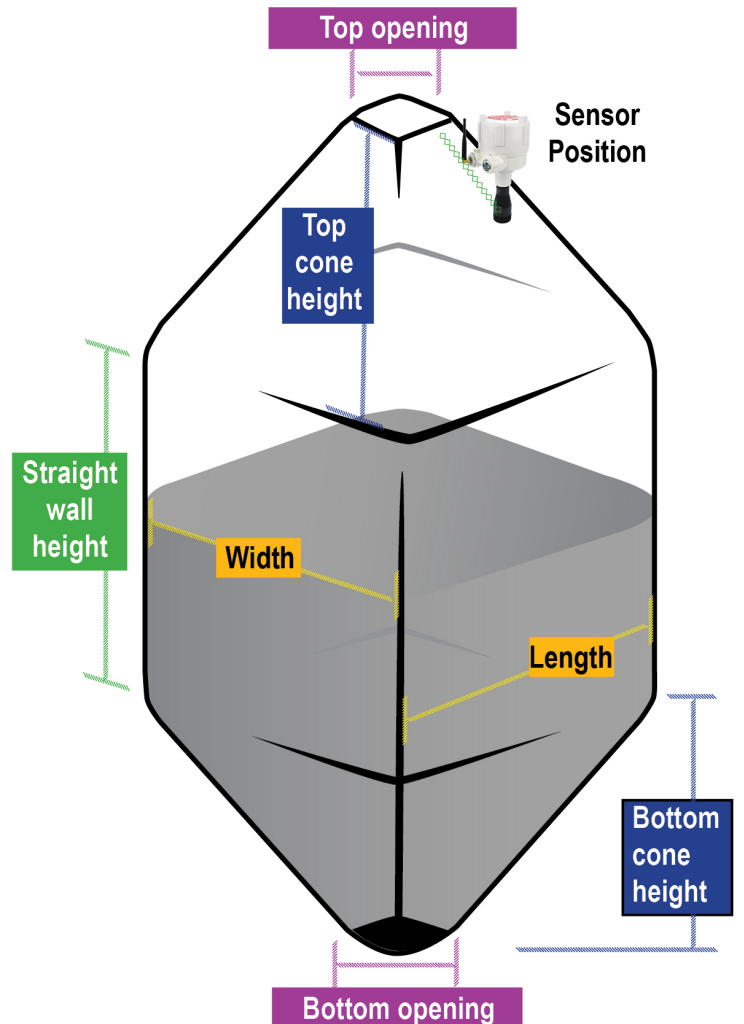
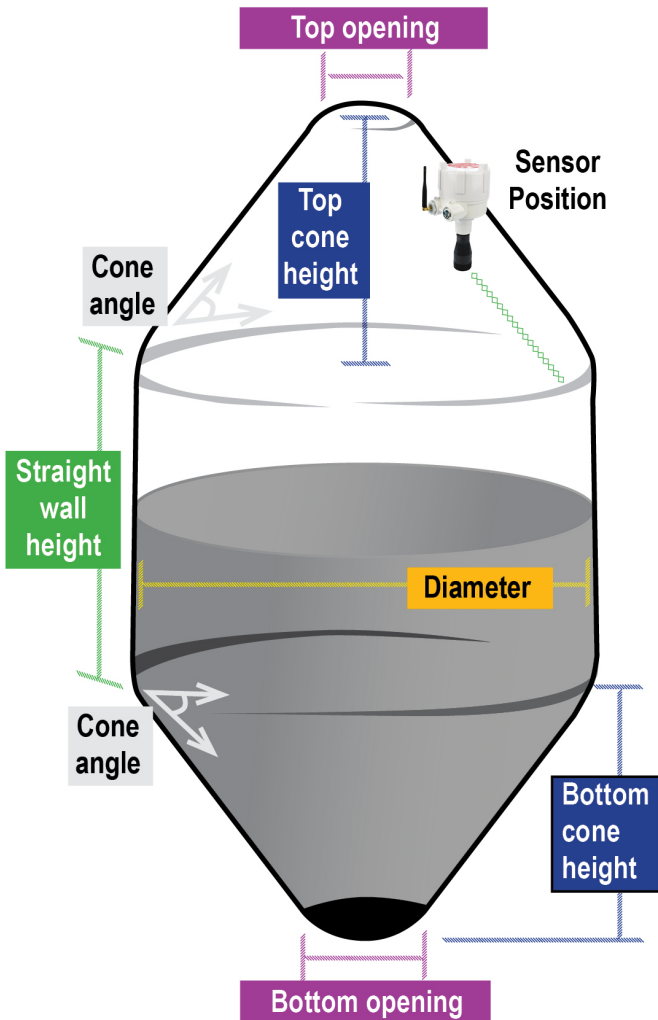
*Many measurements are available through vessel manuals and similar paperwork. Try searching model number and manufacturer name before pulling out your tape measure. \* indicates this measurement needed only if applicable to the vessel shape (see illustration above)*

Top Cone Angle\*: \_\_\_\_\_

Sensor Position \_\_\_\_\_

Bottom Cone Angle\*: \_\_\_\_\_

Capacity \_\_\_\_\_



MORE CONFIGURATIONS →



## Measuring a Vessel | Get Ready for BinCloud

