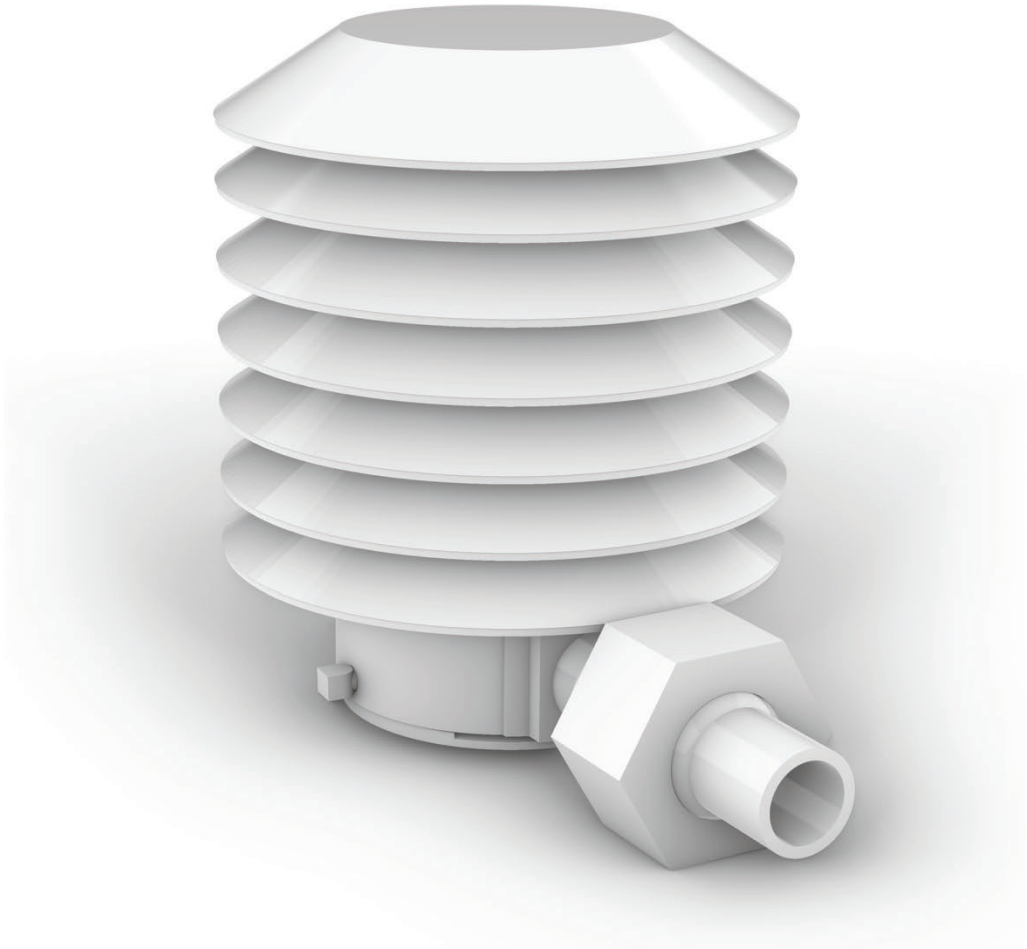


IOTWX ATMOS NODE ASSEMBLY



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Alex Honors, Design Build Associates, LLC

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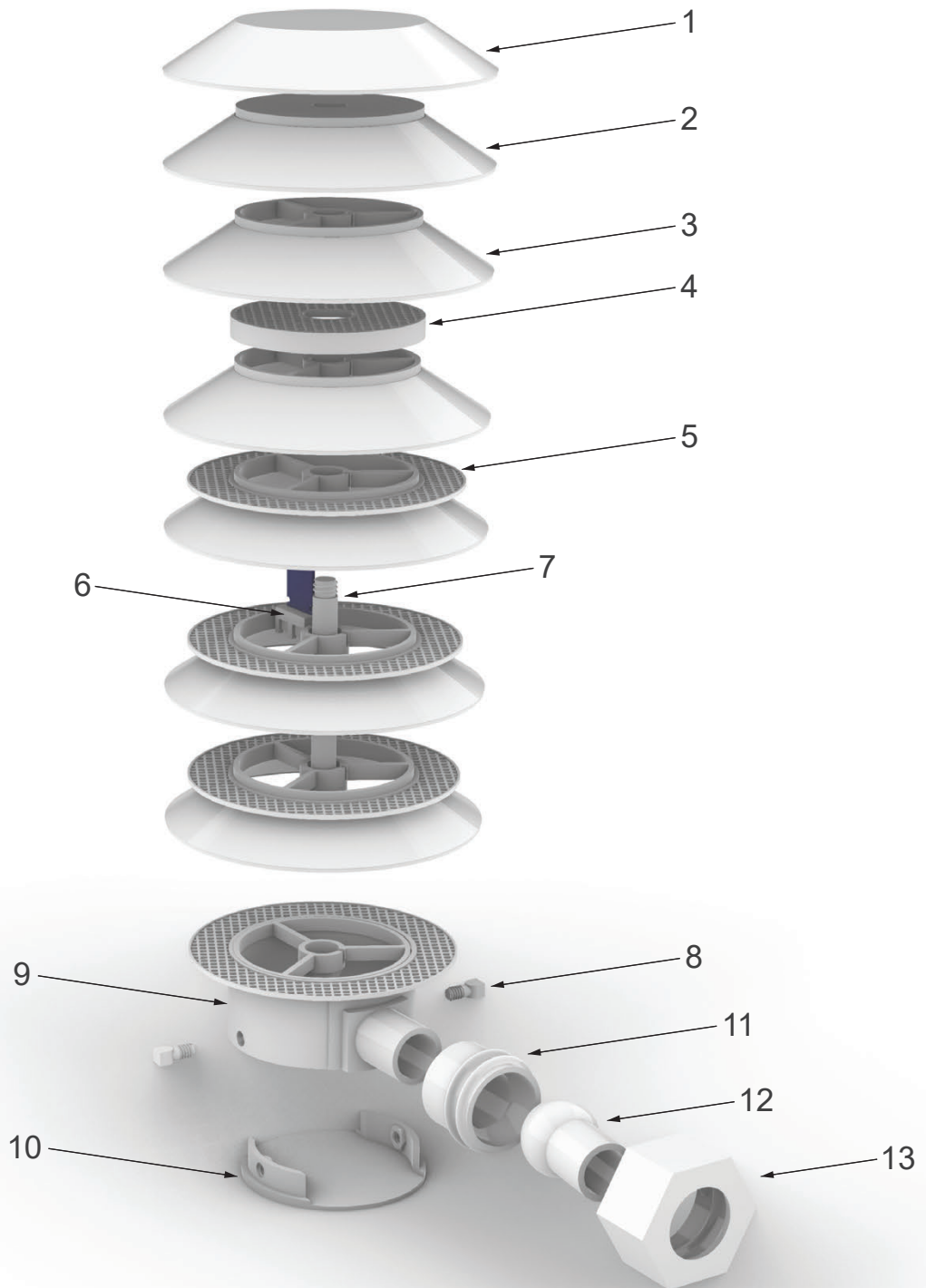
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EXPLODED COMPONENTS

The ATMOS Node allows multiple atmospheric conditions to be sampled and measured while protecting the grove sensors from harmful solar radiation.

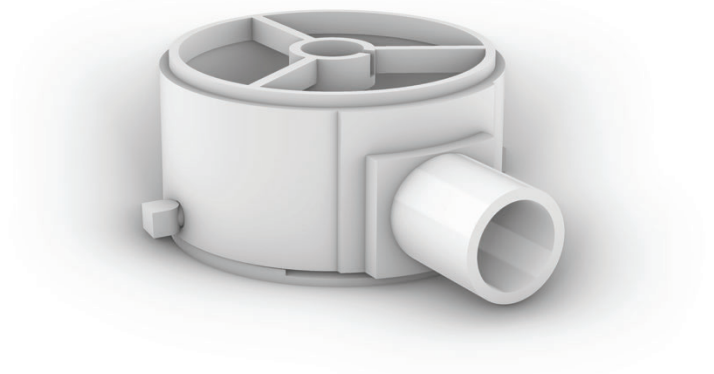
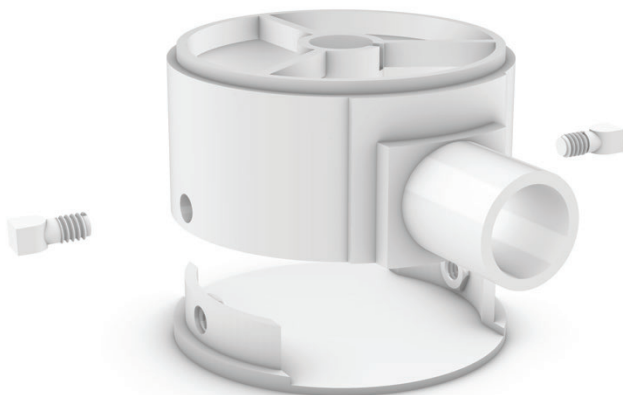


COMPONENTS LIST

No.	Component Name	Quantity
1	Top Leaf	1
2	Single Leaf	1
3	Mid Leaf	5
4	Center Screen	1
5	Screen Ring	4
6	Sensor Clip	1
7	Shaft	1
8	Fastener	2
9	Base	1
10	Base Plate	1
11	Swivel Innerlock	1
12	Swivel Ball Joint Bar	1
13	Swivel Outerlock	1

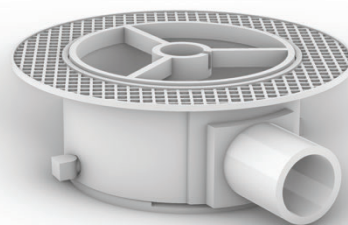
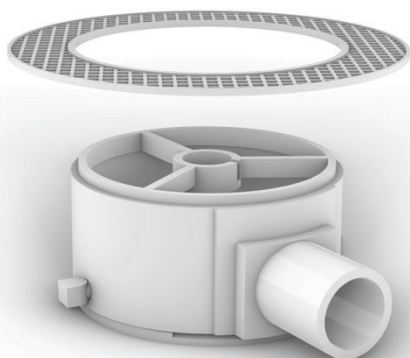
ASSEMBLY STEP 1

Attach Base Plate to Base with 2 Fasteners. Make sure Base Plate threads are lined up with Base holes.



ASSEMBLY STEP 2

Place one screen ring on top of the base.



ASSEMBLY STEP 3

Thread the short end the Shaft into the center of the base.



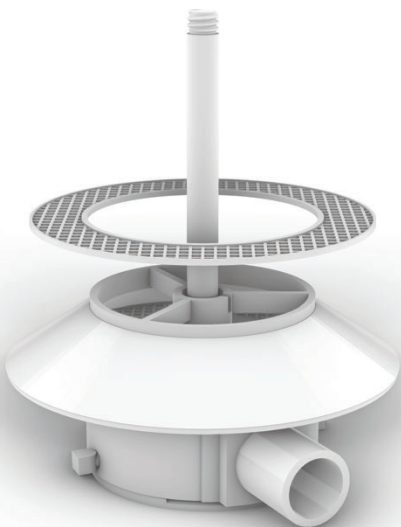
ASSEMBLY STEP 4

Position the first Mid Leaf on top of the first Screen Ring. Line up the tongue in the Mid Leaf with the Groove in the center of the base locking the leaf in



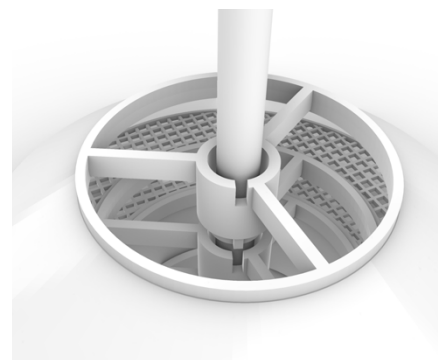
ASSEMBLY STEP 5

Place the second screen ring on top of the first mid leaf.



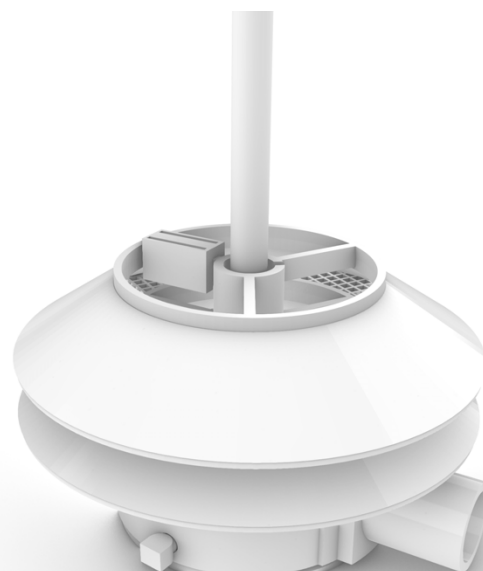
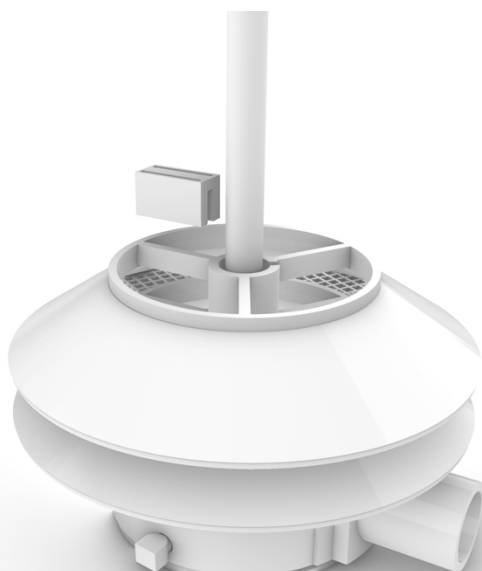
ASSEMBLY STEP 6

Position the second Mid Leaf on the Second screen ring repeating steps the process from step 4 to ensure the leaf is locked in place



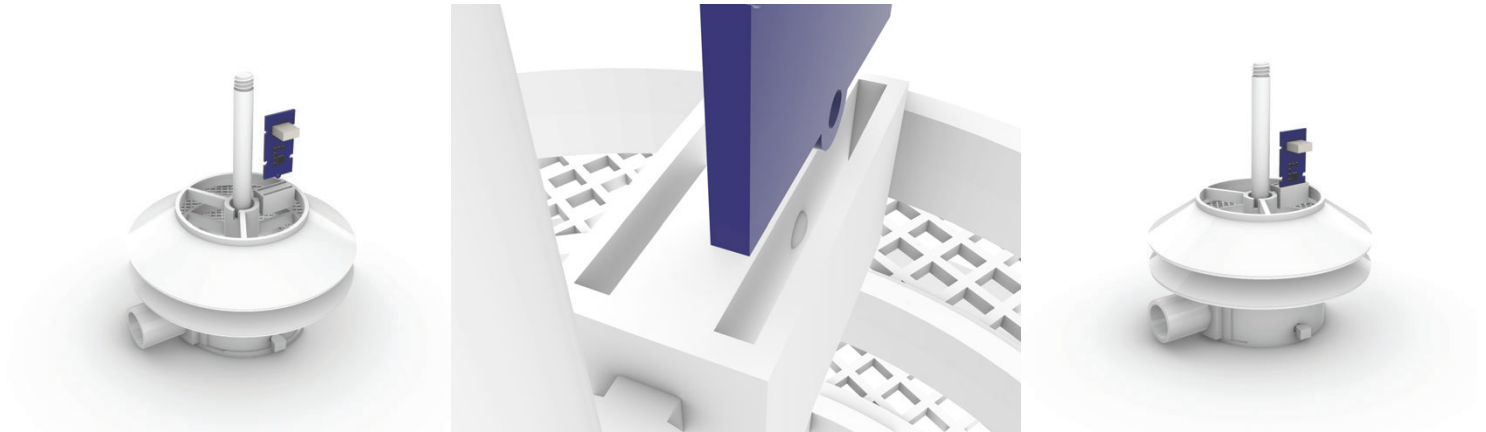
ASSEMBLY STEP 7

Connect the grove sensor holder to the inner arms of the mid leaf.



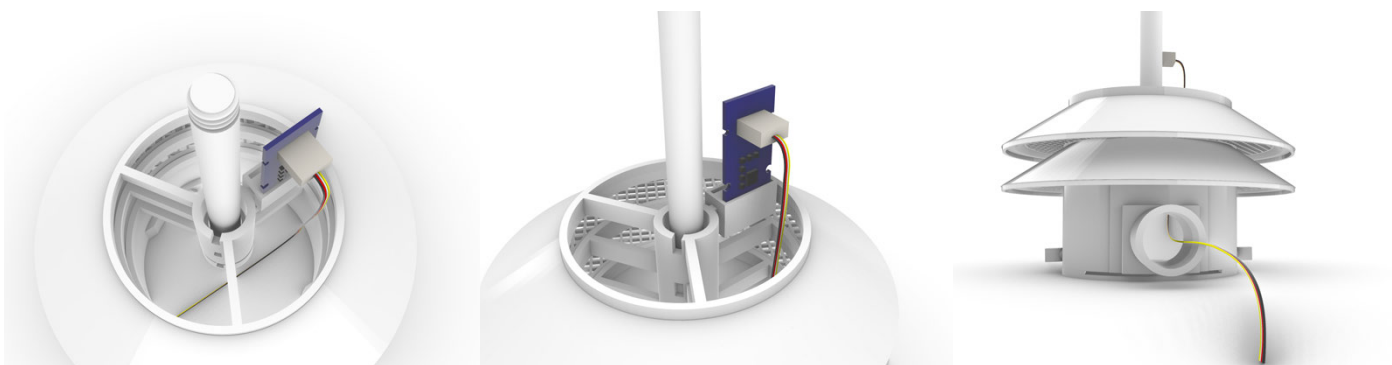
ASSEMBLY STEP 8

Slot the grove Temperature Sensor into the Clip being sure to snap the sensor in place over the bump within the slot of the Clip.



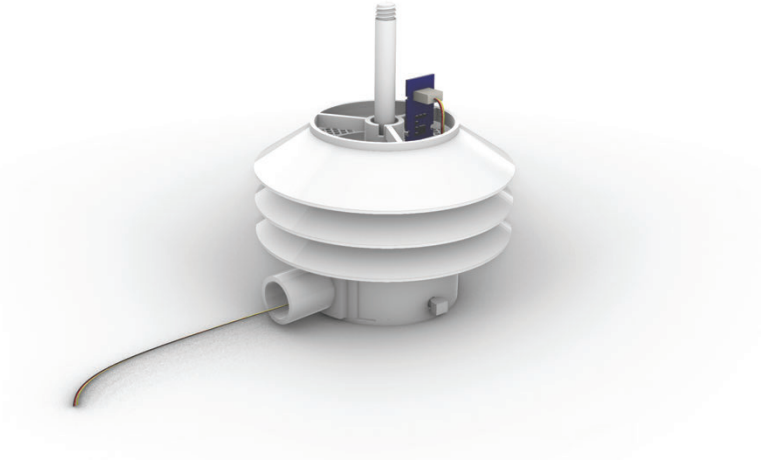
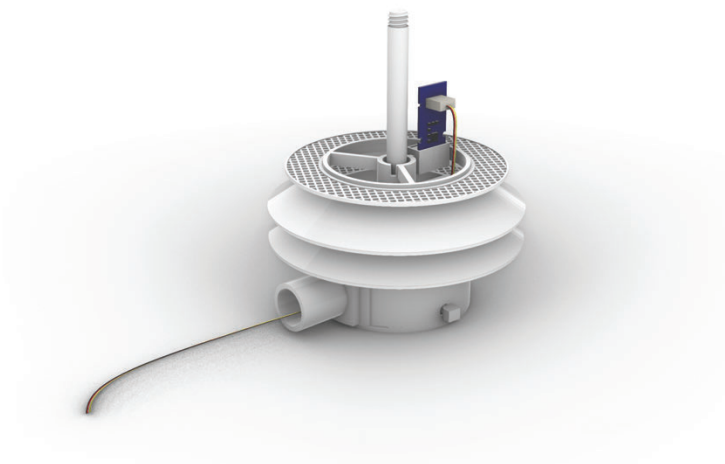
ASSEMBLY STEP 9

Connect the grove cable to the sensor and run the wires down through the Leaves and out of the cylinder in the base.



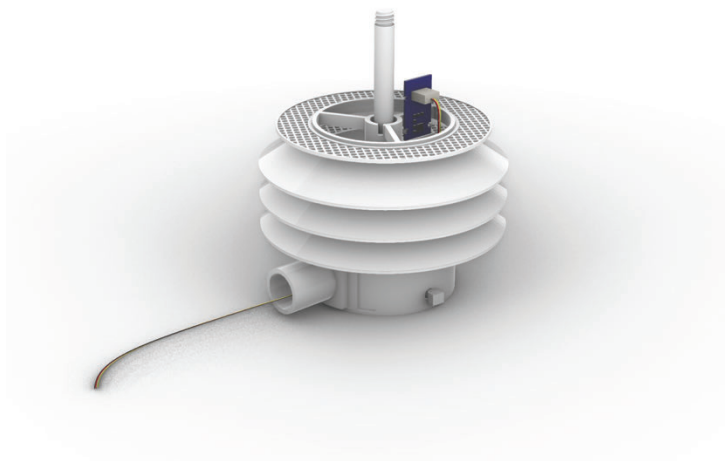
ASSEMBLY STEP 10

Place the third Screen Ring and the third Mid Leaf on the assembly respectively.



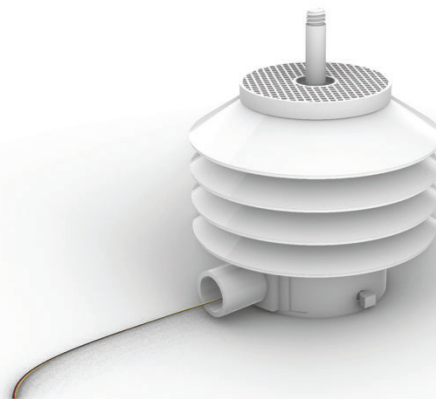
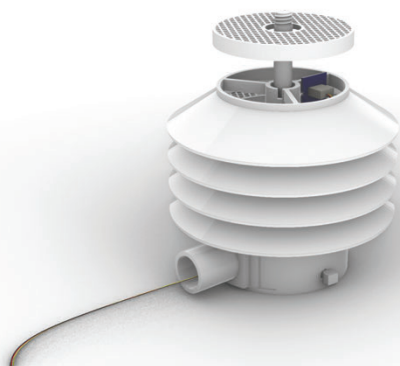
ASSEMBLY STEP 11

Repeat step 10 for the 4th Screen Ring and Mid Leaf.



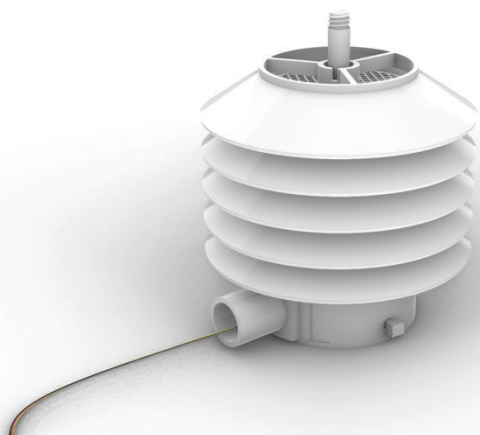
ASSEMBLY STEP 12

Fit the center Screen around the rim of the fourth Mid Leaf.



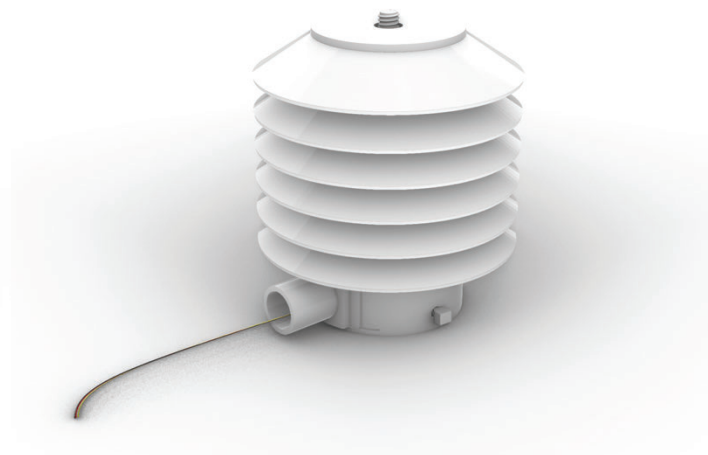
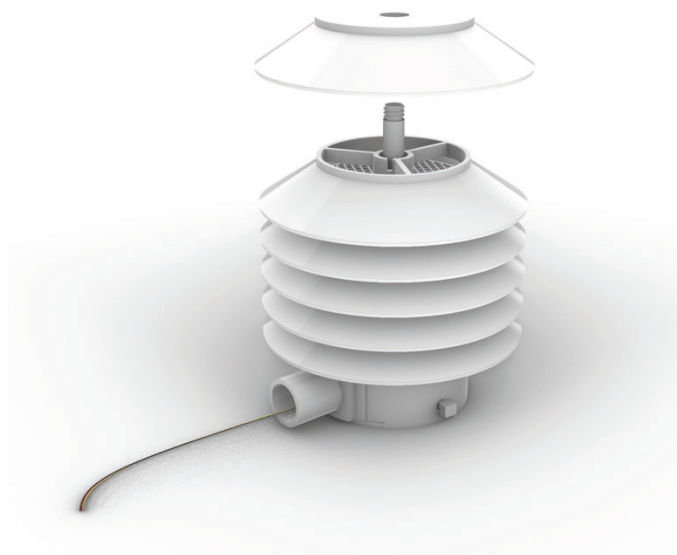
ASSEMBLY STEP 13

Fit the Fifth Mid Leaf into the center screen ensuring a tight fits and lock the Leaf in place by aligning the tongue and groove with the underlying leaf.



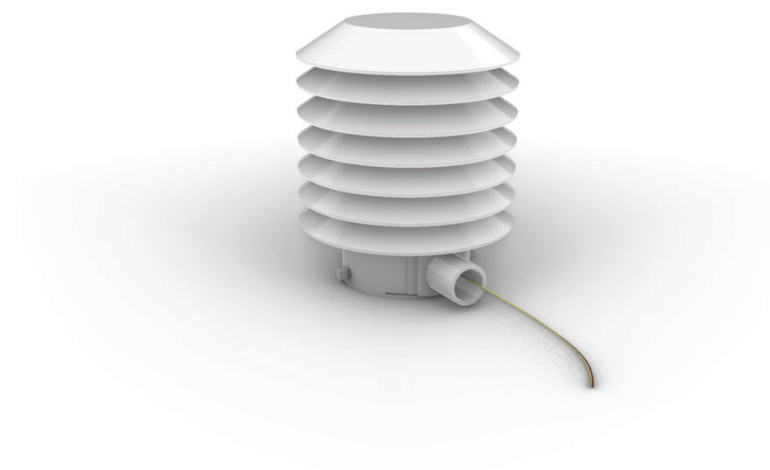
ASSEMBLY STEP 14

Place the Single Leaf onto the Shaft positioning the center ring into the center of the underlying Leaf.



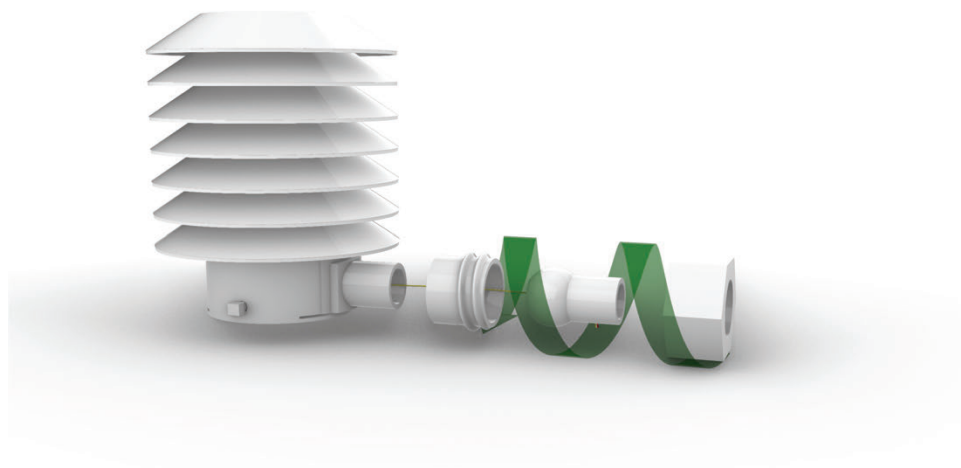
ASSEMBLY STEP 15

Thread the Top Leaf onto the shaft until snug.



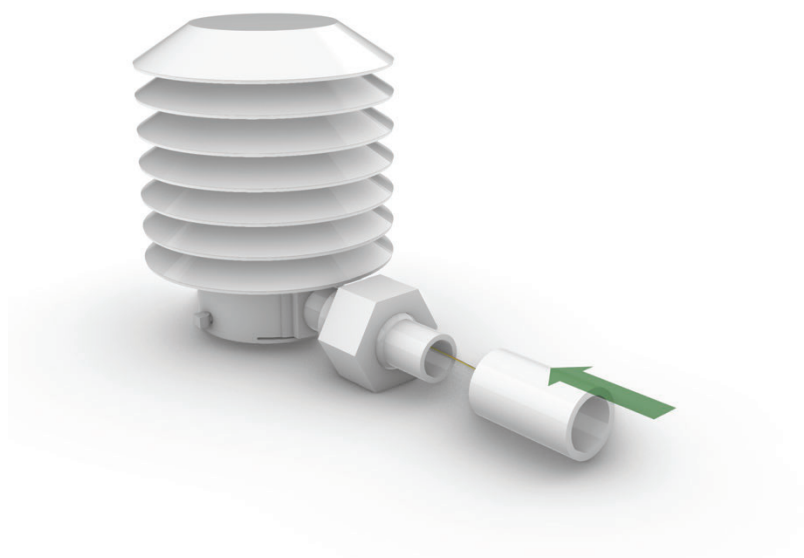
ASSEMBLY STEP 16

Thread the Swivel Outer-lock into the inner-lock with the Ball Joint Bar in the center. Then slot the swivel assembly onto the cylinder at the base.



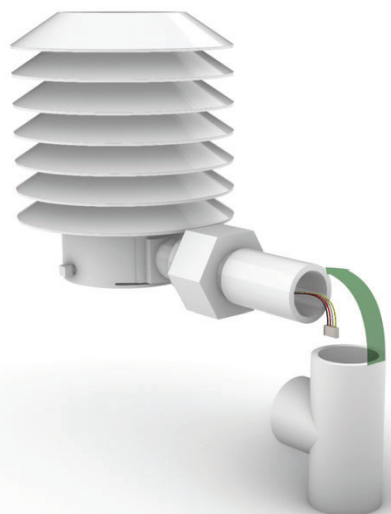
ASSEMBLY STEP 17

Cut a section of 1" PVC pipe 3" or 55cm long and slot it onto the end of the swivel assembly.



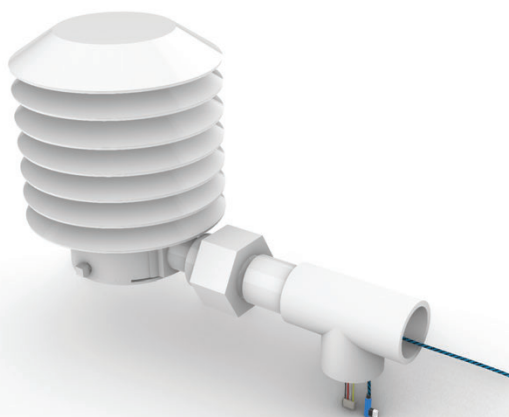
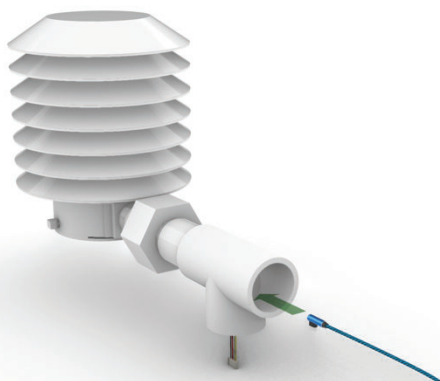
ASSEMBLY STEP 18

Place the PVC T-joint in the smaller PVC short Arm.
Be sure that the grove cable end is sticking out of the
bottom of the T-Joint.



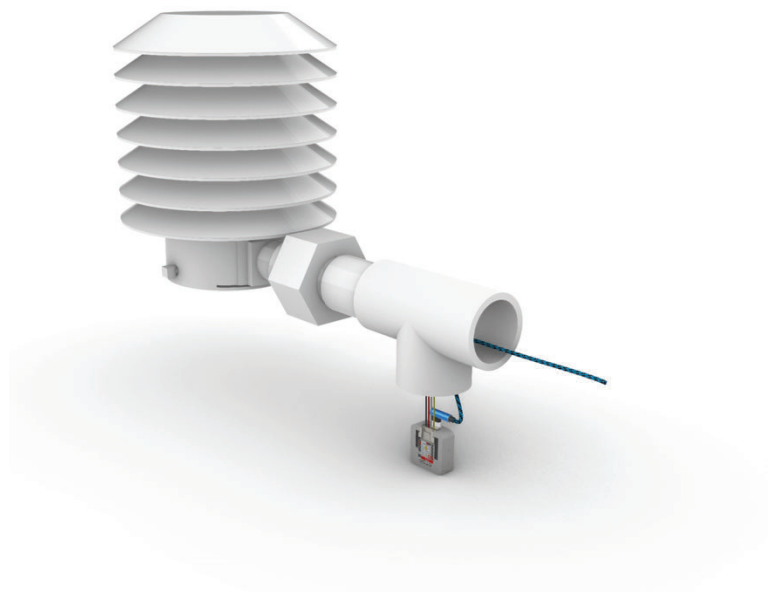
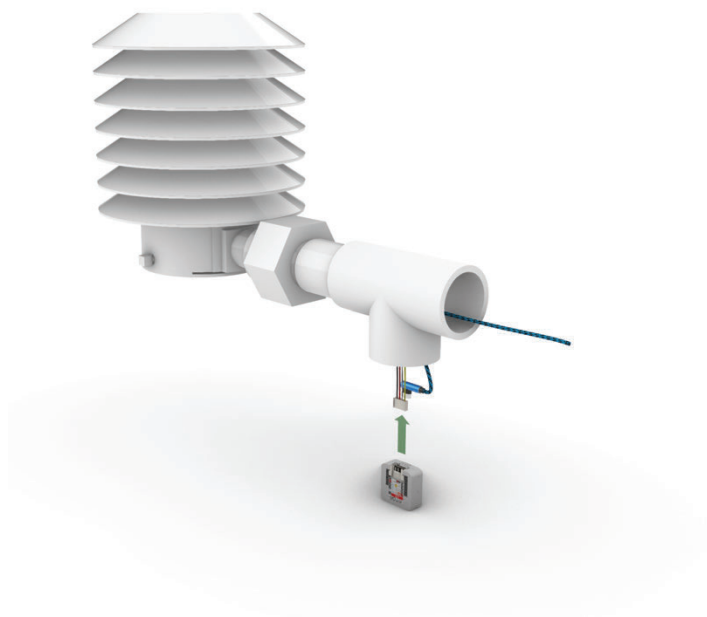
ASSEMBLY STEP 19

Insert the USB-C Power cord into the T-Joint.



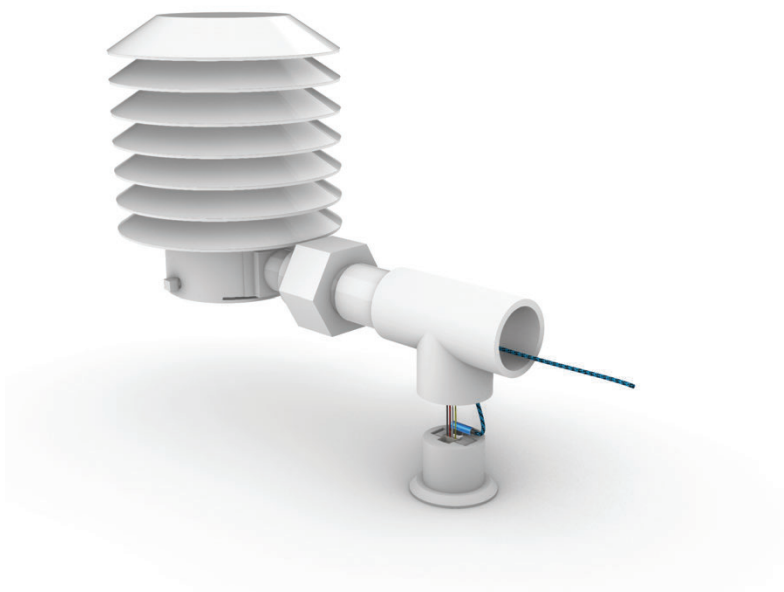
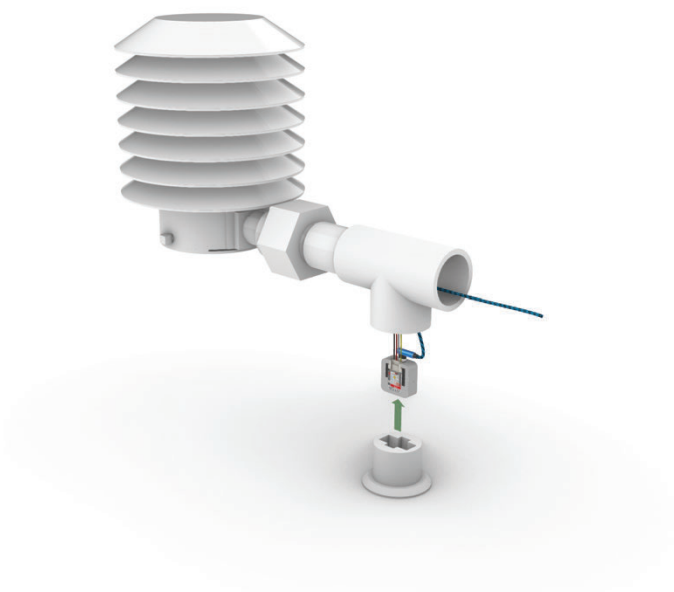
ASSEMBLY STEP 20

Connect the grove and power cords to the microprocessor.



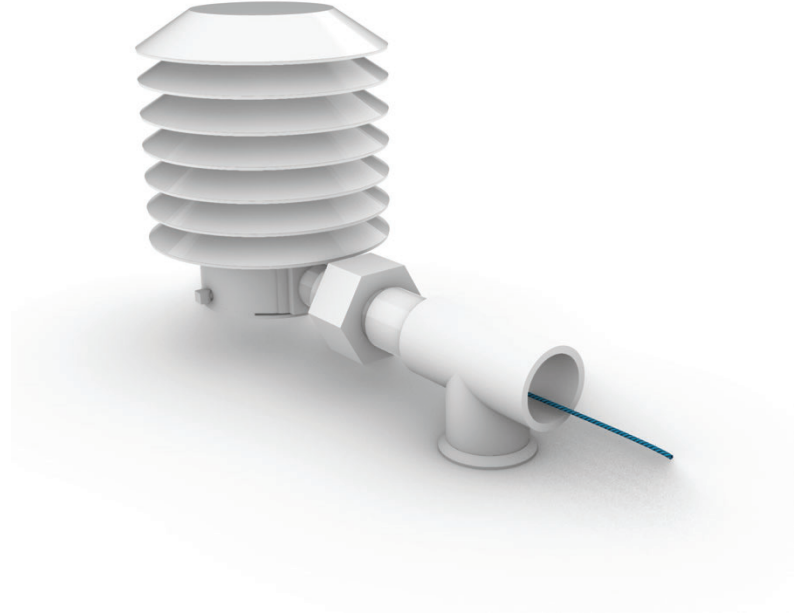
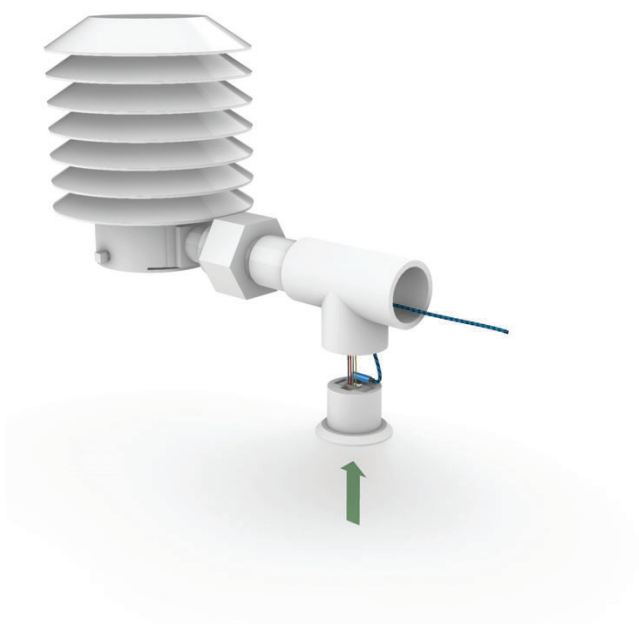
ASSEMBLY STEP 21

Insert the connected microprocessor into the micro holder.



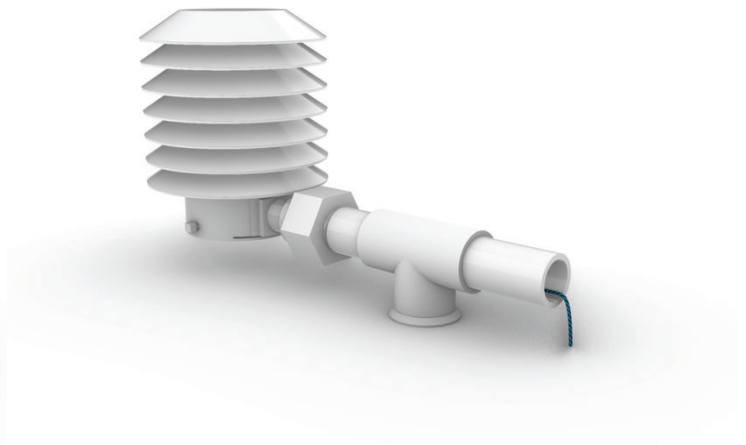
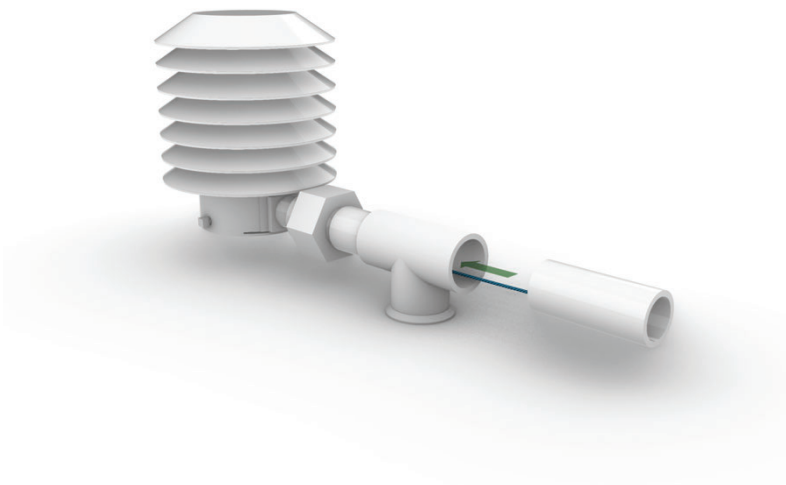
ASSEMBLY STEP 22

Push the Micro holder up into the T-joint.



ASSEMBLY STEP 23

Cut another 3" piece of 1" PVC and insert it into the T-joint ensuring that the power cord is flowing through.



ASSEMBLY COMPLETE

The wires and assembly should be assembled as such.

