

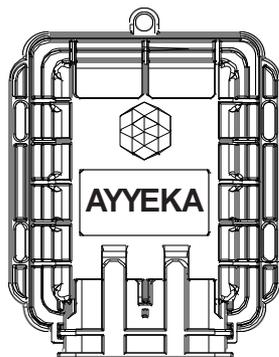
BASIC

WAVELET

KIT

QUICK START

GUIDE



IMPORTANT



Contact **AYYEKA SUPPORT** for technical support:

support@ayyeka.com

+1 (310) 876-8040 (US)

+31 40 209-1001 (EMEA)



ALWAYS COORDINATE Basic Wavelet Kit installation with the local authority before starting installation works, which should be completed by trained and authorized personnel.



The **WARRANTY offered by Ayyeka covers only Ayyeka** supplied hardware and software for the duration of the warranty period as per the warranty terms and conditions.



AYYEKA IS NOT LIABLE for damage or injury as a result of handling, installation, or maintenance of its supplied systems.



DO NOT THROW AWAY the Basic Wavelet Kit, as it contains a lithium battery. Please dispose of properly.



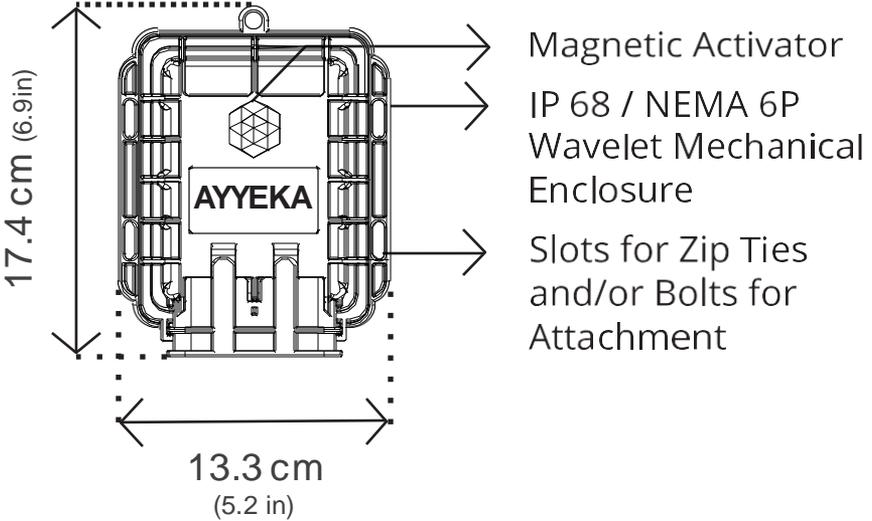
4G (LTE)/3G/2G cellular network signal is required for proper communication.



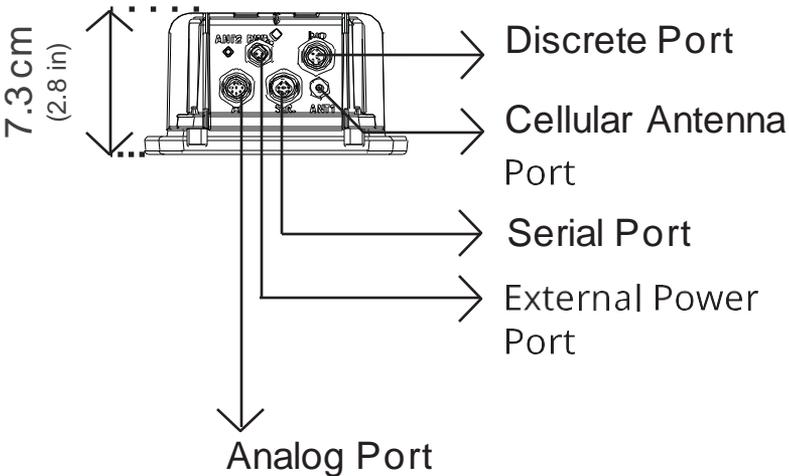
OPERATING TEMPERATURE RANGE of -40°C to +80°C (-40°F to +176°F).

SCHEMATIC

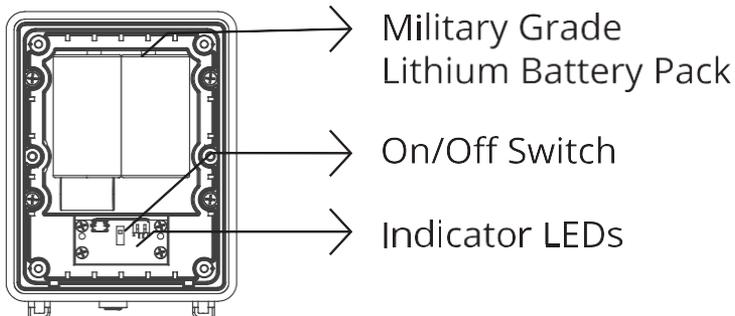
FRONT



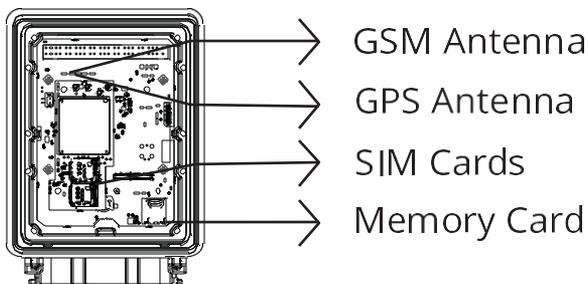
BOTTOM



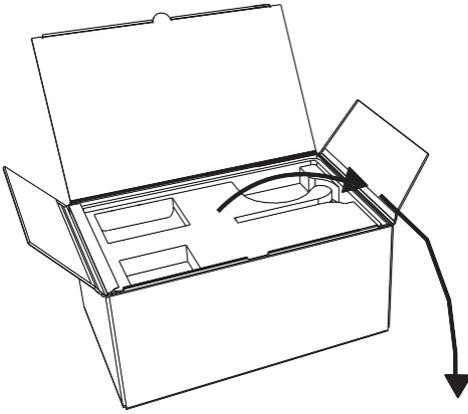
INTERNAL (LAYER 1)



INTERNAL (LAYER 2)

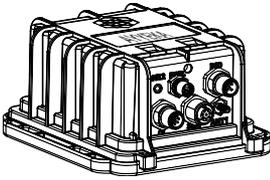


GETTING STARTED

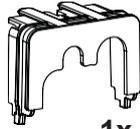


BASIC WAVELET KIT

1 Wavelet Device & Protector

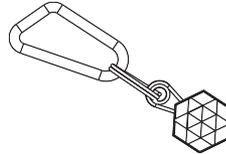


1x



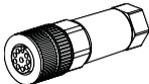
1x

2 Wavelet Activator

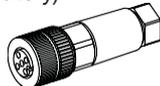


1x

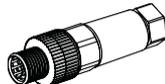
3 M12 Field Attachable
Sensor Connectors
(optional; part WA00180,
ordered separately)



1x

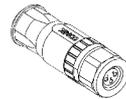


1x

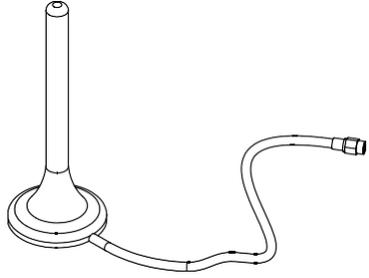


1x

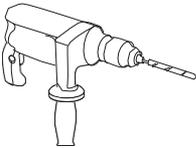
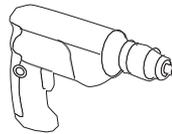
4 M8 Female Field Attachable
Power Connector
(optional; see page 16)



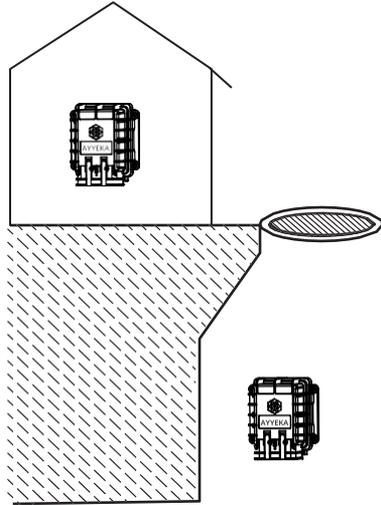
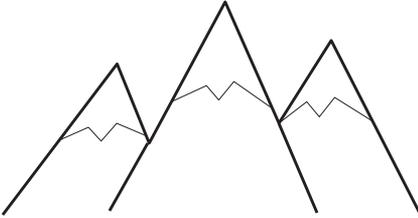
1x

5**Zip Ties, Screws, and Anchors****2x****4x****4x****6****Cellular Antenna**
(REQUIRED; ordered separately)

Other tools and/or materials may be required (not included):

Rotary Hammer**Electric Screw Driver**

NOTE: Special Installation Locations



WEAK SIGNAL LOCATIONS:

If the Wavelet is installed in an area with weak cellular signal, activate the Wavelet and place in the intended installation location with closed doors/access hatch (see step 3).

Log in to home.ayyeka.com to ensure that cellular signal has been recently updated in the last few minutes.

UNDERGROUND/INDOOR WAVELET INSTALLATIONS:

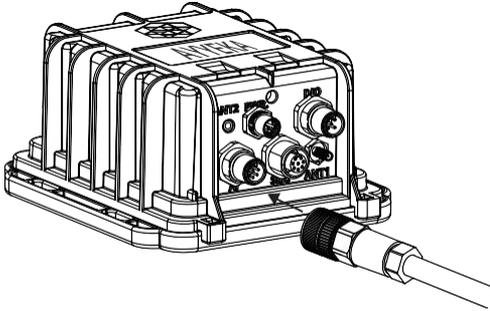
Before installation, initiate the GPSoutside by activating the Wavelet (see step 3).

Wait for at least 15 minutes, then log in to the user interface at home.ayyeka.com to **confirm updated location** on the map.

SENSOR CONNECTION

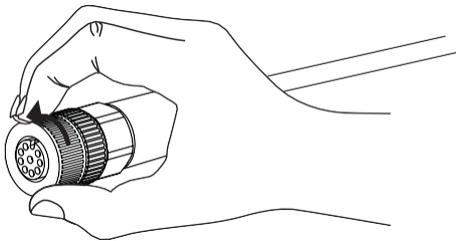
1

Connect the sensor cable(s) assembly with the field attachable connector to the mating panel connector on the Wavelet. Turn the adjustable stainless steel end piece to secure the field attachable connector to the Wavelet.

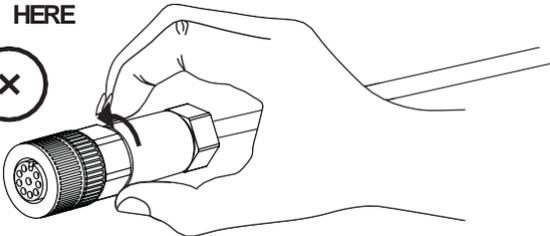


CAUTION: Do not turn the black plastic hood of the connector. Turning the black hood may cause the wires to disconnect, break, and/or damage the connector pins.

TURN HERE



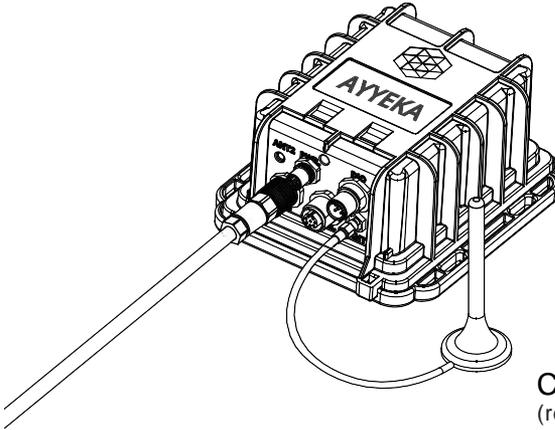
DO NOT
TURN HERE



EXTERNAL ANTENNA CONNECTION

2

Connect the Cellular antenna to the antenna port (ANT 1).



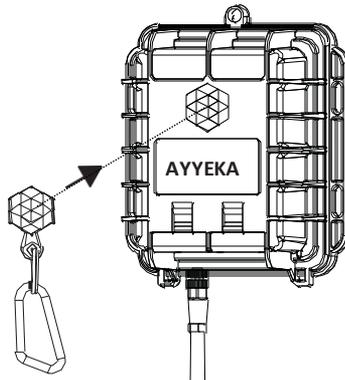
Cellular Antenna
(required)

IMPORTANT NOTE:

The antenna does not appear in the remaining depictions in this guide, but should remain connected once properly secured to the appropriate panel connectors.

3

Place the magnetic Wavelet Activator on the embossed Ayyeka logo on the front of the Wavelet enclosure. Wavelet will initiate a 15 minute test mode of high frequency sampling and transmission. The device will then return to its **default configuration**.



WAVELET ACTIVATION

4 The LED light on the back cover of the Wavelet will indicate the device status.

LED Status Indications

LED

Device Status

All LEDs are off

Not connected to network. The LED lights do not blink when the device is sampling.

Note: Wavelet may be powered down (power switch is in the OFF position), in Hibernate mode, **or have insufficient battery power.**

Green-Red-Blue-Red-Green LEDs blink sequentially 5x

Wavelet activated using Magnetic Activator.

Green LED is blinking

Attempting to connect to GSM network.

Green LED remains on

Transmission of data is in progress **via GSM; the LED will turn off when** transmission is complete.

Green and Red LEDs blink 5x

GSM communication error. The device failed to transmit.

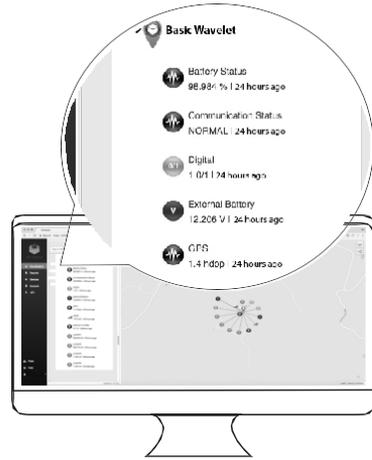
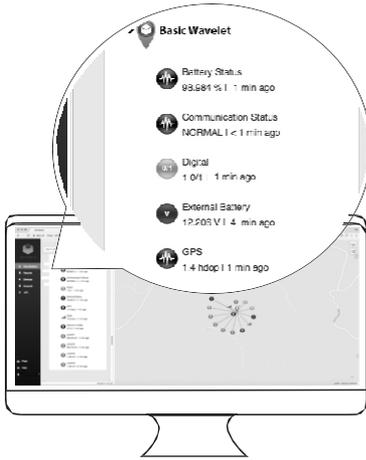
5 Access the Ayyeka user interface at home.ayyeka.com using your log-in credentials. Expect data to appear between 5 – 10 minutes after the test mode is initiated.



WAVELET ACTIVATION

6

The screen display should resemble the following:



If the Wavelet is transmitting properly, you have completed the installation successfully and can begin collecting and viewing your data!

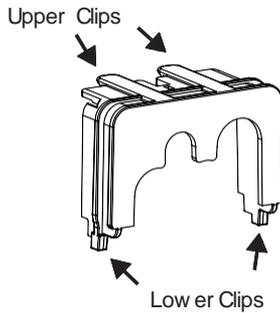


If data does not transmit properly, change the Wavelet installation location and activate again (step 3). If the problem persists, contact Ayyeka for assistance.

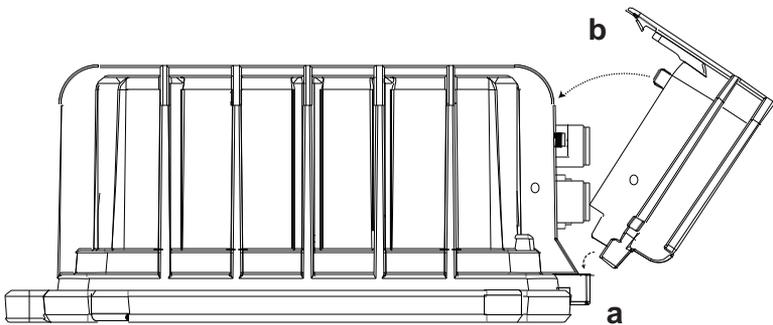
support@ayyeka.com
+1 (310) 876-8040 (US)
+31 40 209-1001 (EMEA)

7

After the Wavelet completes the transmission process, place the Wavelet protector above the connector ports and secure the Wavelet protector into the Wavelet enclosure.



- a. Insert the two lower clips into the two lower holes of the Wavelet enclosure.
- b. Snap the upper clips into place in the two grooves above the panel connector.

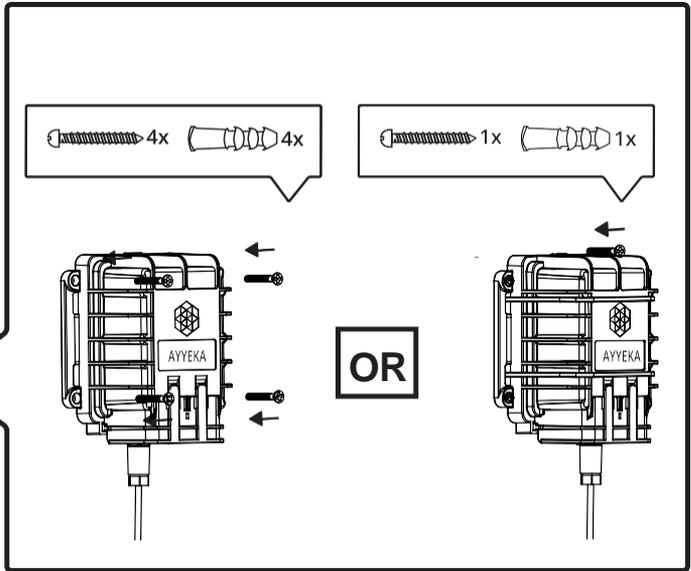


CAUTION: The protector is provided to shield the connector from tampering or overexposure that could result in disconnected wiring.

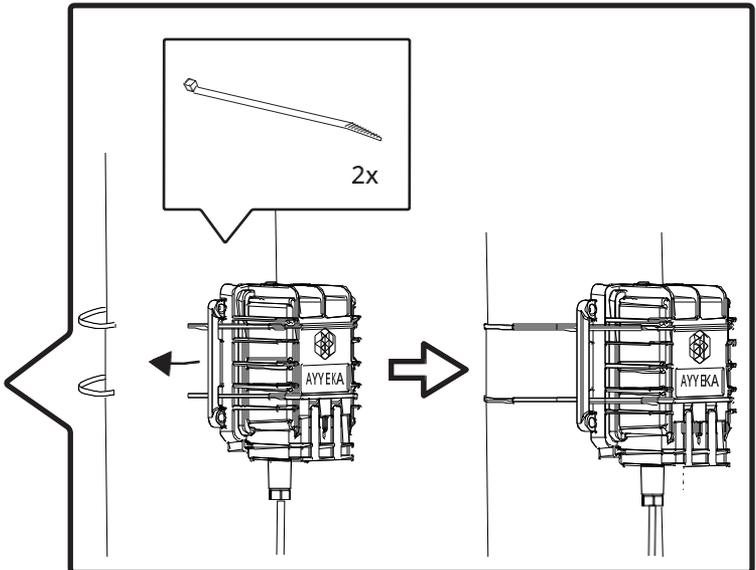
8

Secure the Wavelet on a wall, pipe, or other secure mounting location using zip ties or screws.

Wall Mounted



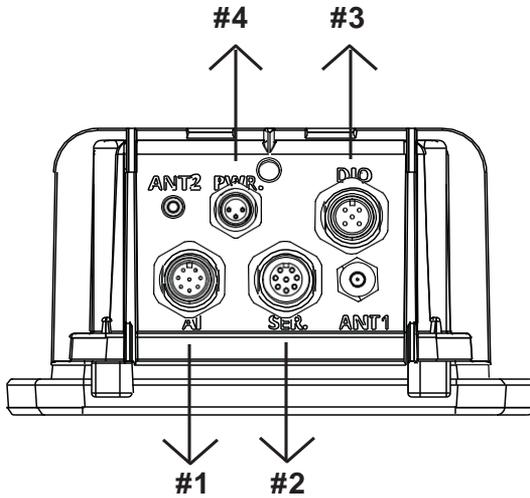
Pipe Mounted



**YOUR BASIC WAVELET KIT
IS NOW SUCCESSFULLY
INSTALLED!**

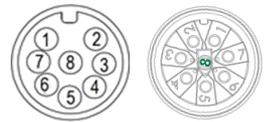


WAVELET PINOUT



ANALOG – PANEL CONNECTOR #1 – M12 8-PIN MALE

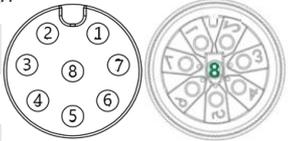
Connector Pin #	Function	Description	Cable Connector Pin Assignment	
			Front	Back
1	Signal	4-20mA or 0-27.5V Input #1		
2	Common	Negative (-)		
3	Supply+	Wavelet 12V Power Supply #2 (+)		
4	Supply+	Wavelet 12V Power Supply #1 (+)		
5	Signal	4-20mA or 0-27.5V Input #4		
6	Signal	4-20mA or 0-27.5V Input #3		
7	Signal	4-20mA or 0-27.5V Input #2		
8	Common	Negative (-)		



WAVELET PINOUT

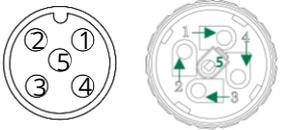
SERIAL – PANEL CONNECTOR #2 – M12 8-PIN FEMALE

Connector Pin #	Function	Description	Cable Connector Pin Assignment	
			Front	Back
1	Signal	RS232 TX		
2	Supply+	Wavelet 12V Power Supply #4 (+)		
3	Supply+	Wavelet 12V Power Supply #3 (+)		
4	Signal	SDI-12		
5	Signal	RS485 B		
6	Signal	RS485 A		
7	Signal	RS232 RX		
8	Common	Negative (-)		



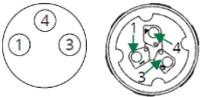
DISCRETE – PANEL CONNECTOR #3 – M12 5-PIN MALE

Connector Pin #	Function	Description	Cable Connector Pin Assignment	
			Front	Back
1	Signal	Pulse Counter/Digital Input #0		
2	Common	Negative (-)		
3	Signal	Pulse Counter/Digital Input #1		
4	Common	Negative (-)		
5	Signal	Digital Input/Output (DIO)		



POWER – PANEL CONNECTOR #4 – M8 3-PIN MALE

Connector Pin #	Function	Description	Cable Connector Pin Assignment	
			Front	Back
1	Supply+	5-28VDC (+)		
3	No Signal	No Connection		
4	Common	Negative (-)		

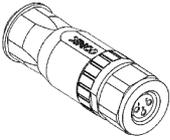


POWER CONNECTOR PINOUT

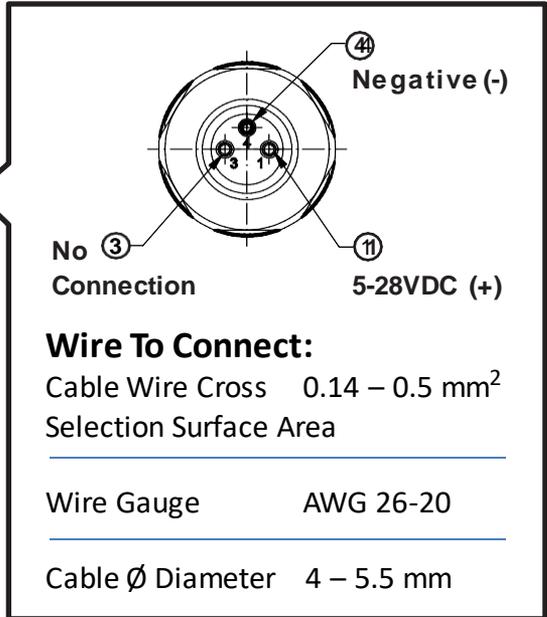
If using an external power source, refer to the pinout below:

EXTERNAL POWER:

M8 3-Pin Female
Power Connector



+ Installation Tool
for Wire Termination
(Included)





QUESTIONS?

www.ayyeka.com

support@ayyeka.com

+1 (310) 876-8040 (US)

+31 40 209-1001 (EMEA)