SuperCom PureOne Electronic Monitoring Solution User Guide

Super Com Confidential Information
PUREONE

ELECTRONIC MONITORING SOLUTION
User's Guide

Contents

Pure One Monitoring

PureOne monitoring solution overview

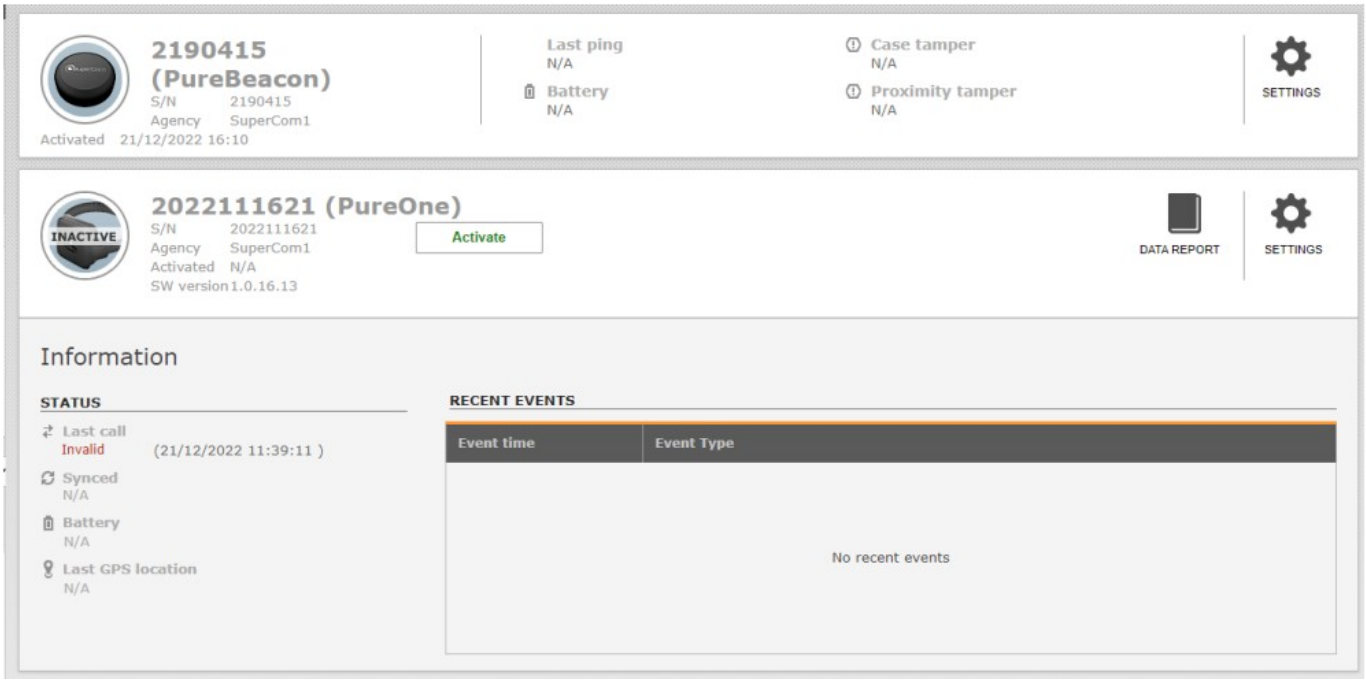
The Pure One is an all-in-one device, containing GNSS, cellular and RF BLE modules. The integrated BLE module allows the device to communicate with the Pure Beacon (home unit) Bluetooth device while the GNSS module is used for location positioning using sate lilts. The built in LTE cellular module is used for communication

with Pure Monitor.
The PureOne device comes with a portable charger, that allows seamless and convenient charging.
Both the charger and the Purine device are equipped with LED interface that indicates the different states and modes of the devices.

Turning the Pure One on
To turn on the Pure One, simply connect the charger to the device. Once the device detects that the charger is attached, the Pure One will automatically be turned on.

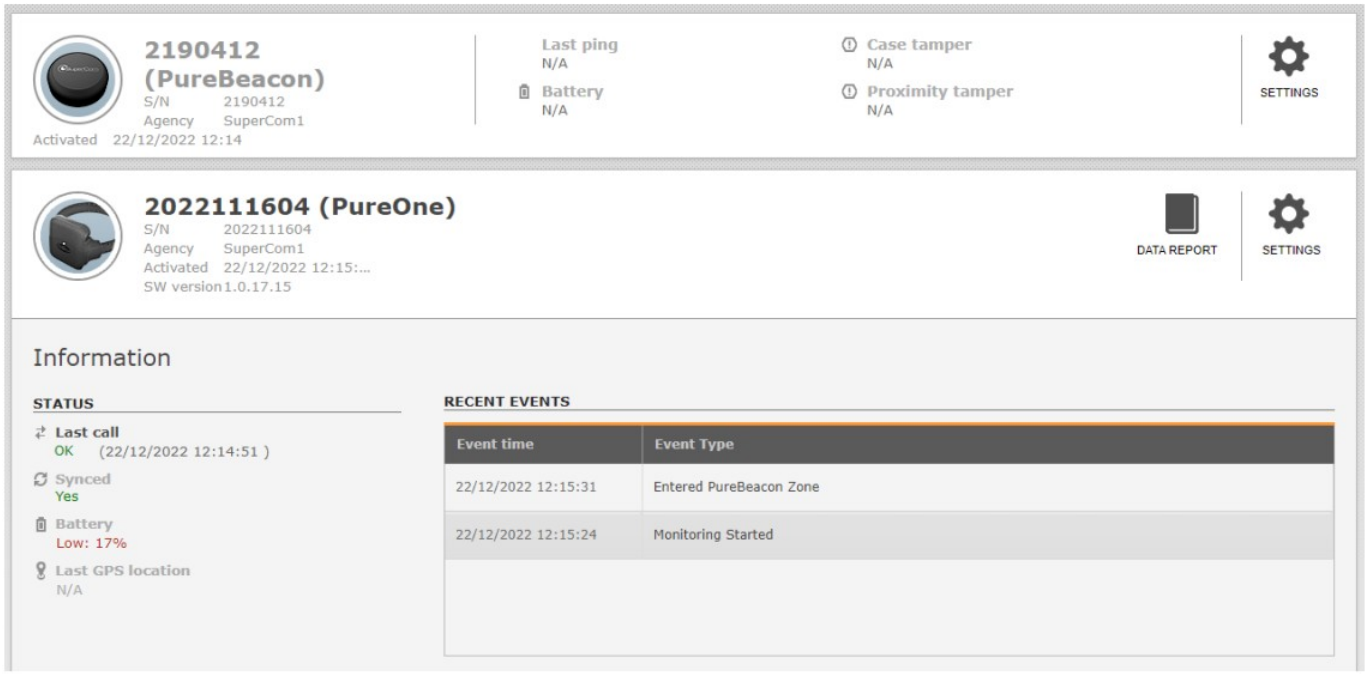
Allocation of the Purine & the Pure Beacon devices in Pure Monitor
Once offender profile was created in the system the device can be assigned to it. The allocation of the device is done via Pure Monitor, in the following steps:

1. On the Offender's Equipment Tab, click Allocate Device
2. Search for the Purine serial number or select the Purine from the list of devices then click Allocate
3. If a Pure Beacon device is needed repeat step 2 i.e. select a Pure Beacon home unit by serial number and click Allocate
4. The Purine and Pure Beacon devices are now added to the Offender's Equipment list and is ready for activation.



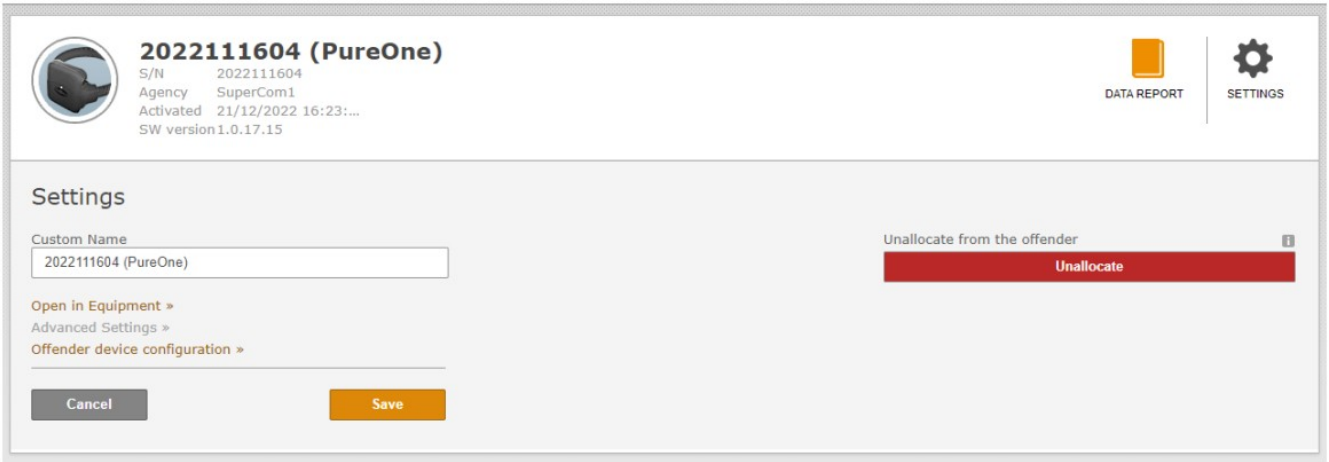
Monitoring devices are allocated to an offender and ready for activation.

Monitoring start (a activation) in Pure Monitor
Once the monitoring device/s are allocated the main device can be activated in order to enroll and start monitoring. Click "Activate" button colored in green to send activation request to the Pure One. Once clicked, the information section soon will become available and device's status and recent events will be displayed.



Monitoring end (allocation) in Pure Monitor
To finish the monitoring devices needs to be removed from offender in Pure Monitor. The allocation of the device/s is done in the following steps:

1. If the offender has any Pure Beacon(s) allocated to them, the device must be unallocated from the offender prior to the allocation of the Purine device.
2. A device can be unallocated by going to the Offender's Equipment Tab, clicking on a device's Settings button and then clicking on the red Unallocated button:



3. Once the device confirms the allocation request was received it will be removed from the offender and will not appear under their Equipment tab.

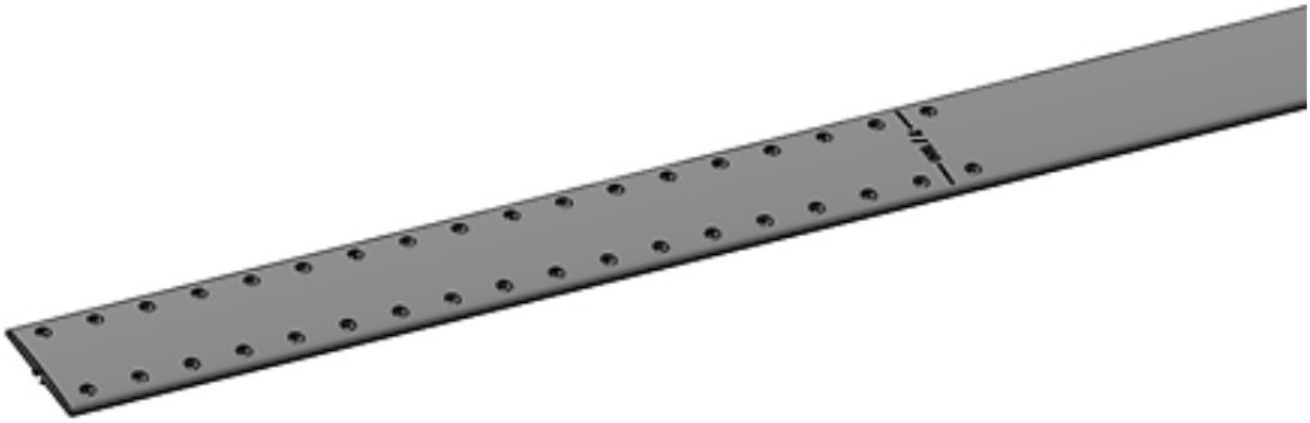
Pure One and Pure Beacon Installation

Parts o f Pure One installation kit
The kit of the Pure One includes the following items:

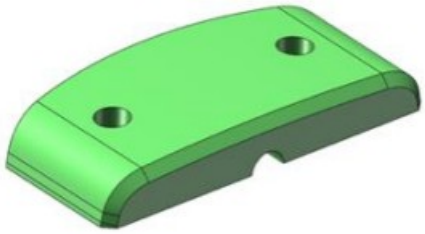
Pure Beacon device (optional)

Pure One device

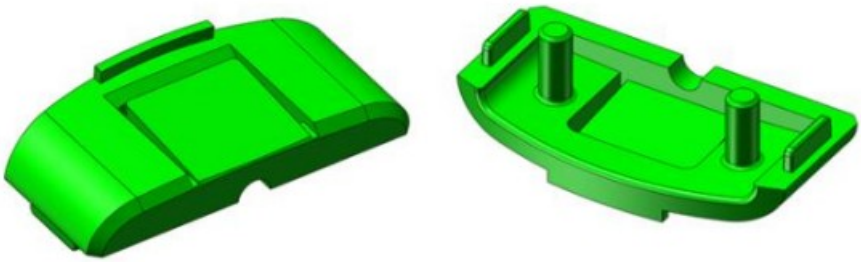
Portable Pure One charger



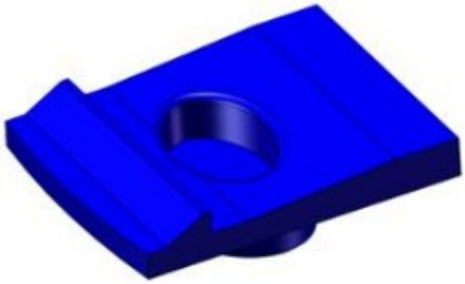
Pure One strap



Upper strap buckle (disposable)



Bottom strap buckle (disposable)



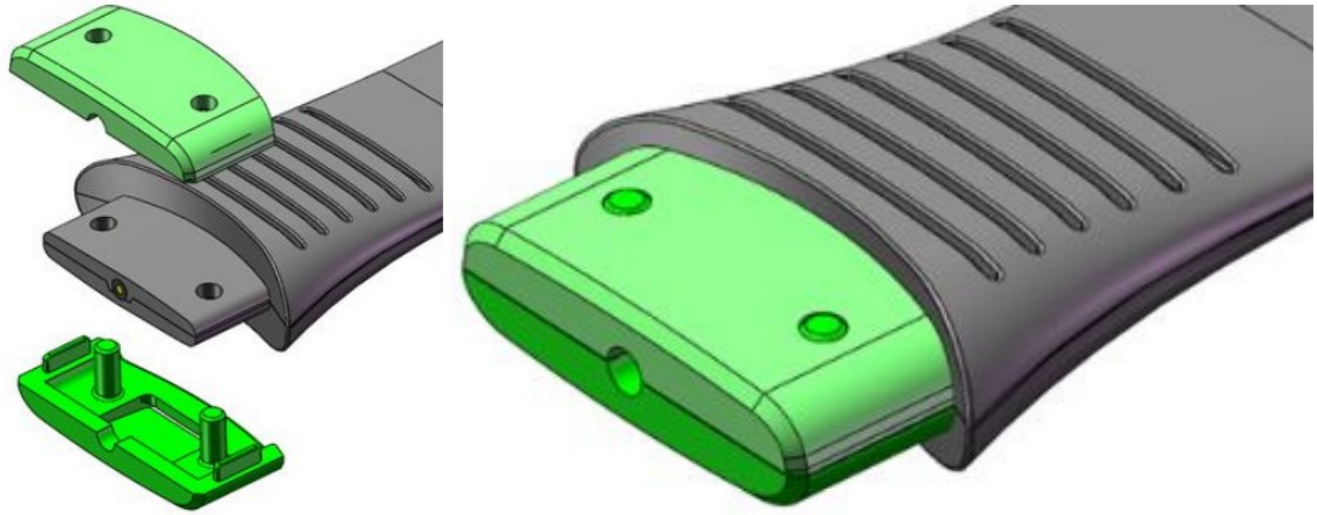
Locking clip (disposable)

Strap cutting tool for strap length adjustment

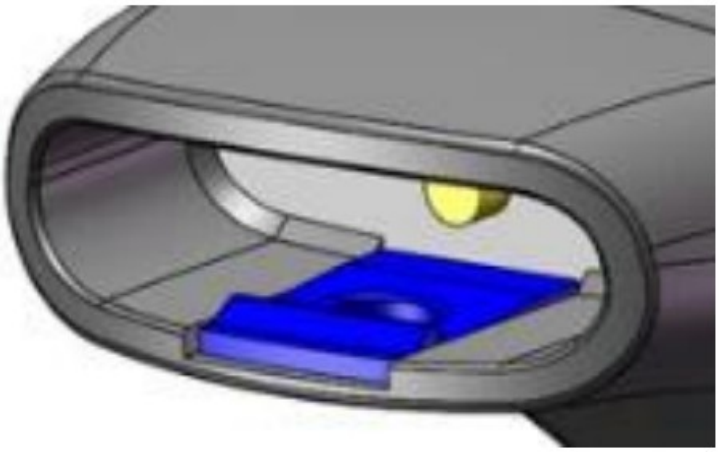
Medical scissors for strap cutting and PureOne bracelet removal

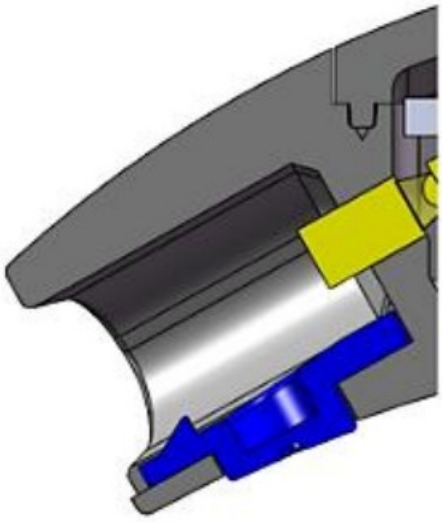
PureOne Installation
The kit of

1. Prepare:
   a. PureOne device
   b. The upper and bottom strap locks
   c. Locking pin
   d. Strap
2. Attach the upper and lower strap buckles to one end of the ankle bracelet strap.

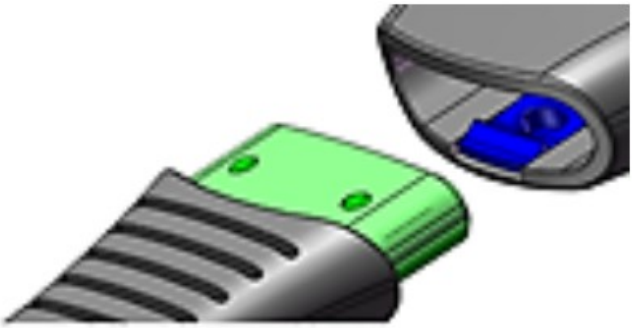


3. Fit the disposable locking clip into one end of the main body.





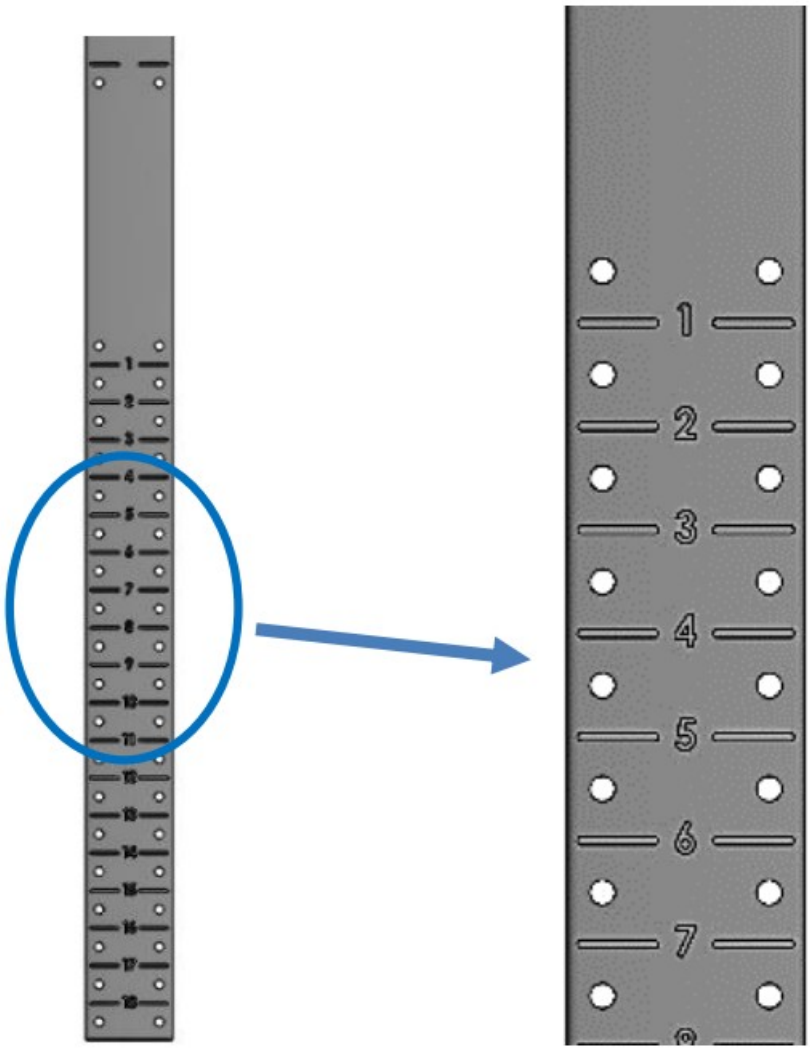
4. Fit the end of the strap into the end of the main body and push until the strap clicks in place.



5. Measure the strap on the offender's ankle. The strap should be snug, but still have some looseness so it does not hurt the ankle. The correct strap tightness should be loose enough that you can fit an index finger between the Strap and the ankle.

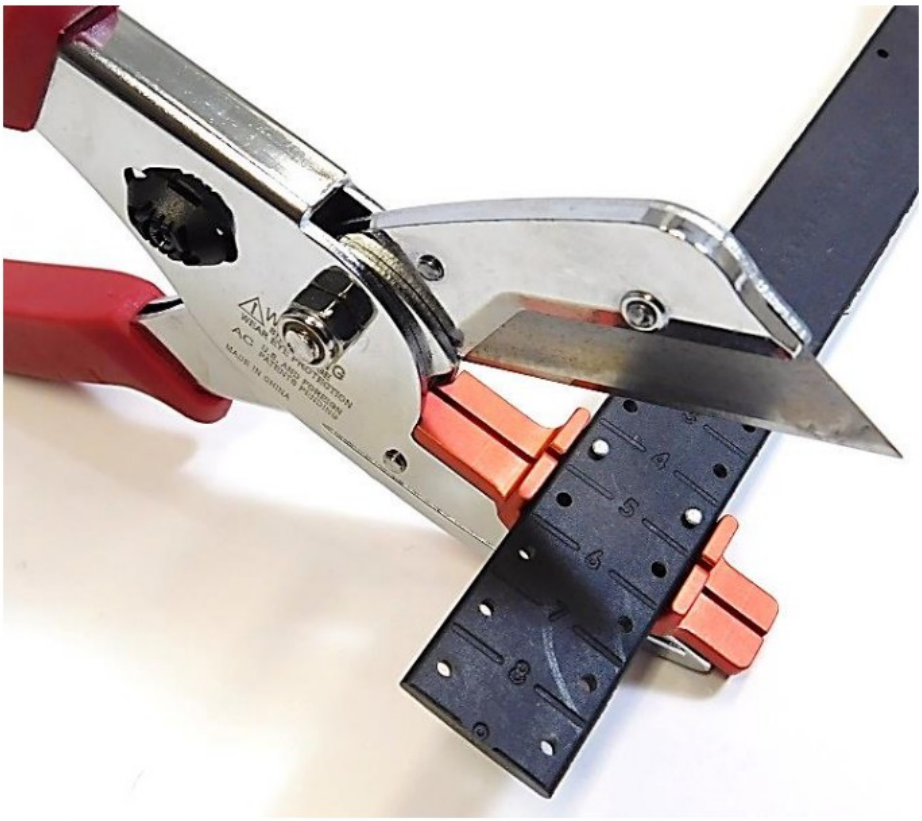
Measuring the band on the ankle

6. Use numbering on the strap to select and remember the suitable length of the band.



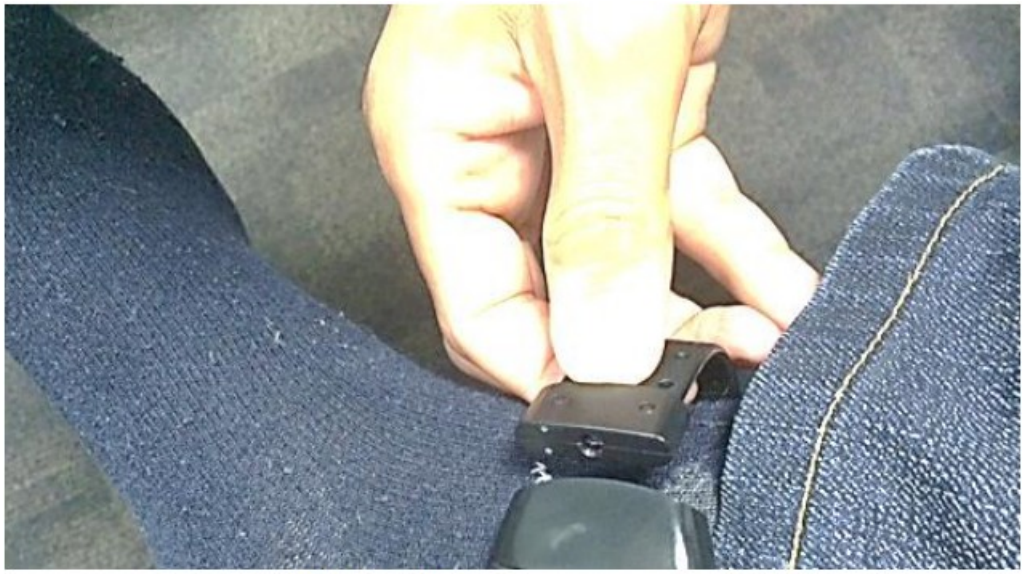
Selecting a number on the band

7. Use the provided cutter to cleanly cut the band.



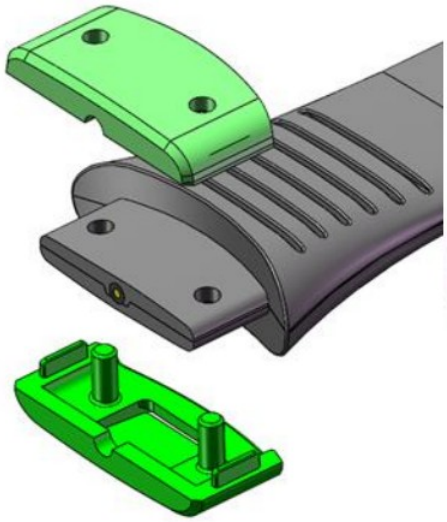
Cutting the strap to required length using the provided cutter.

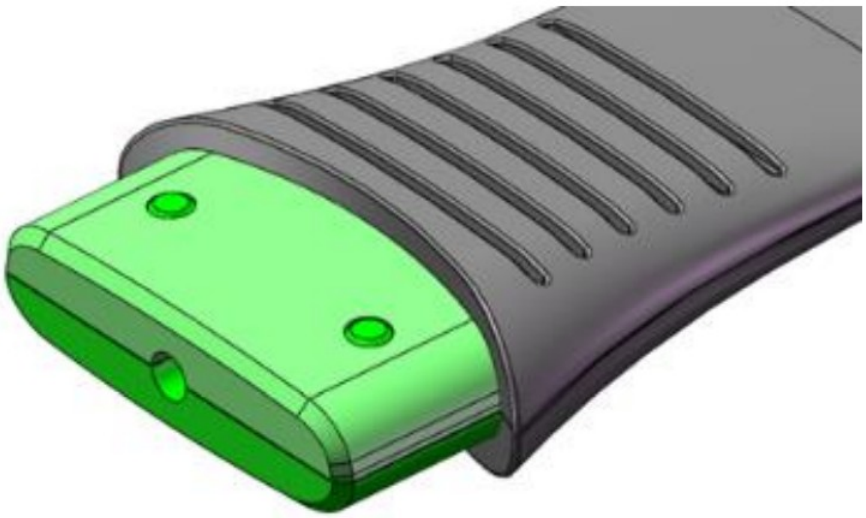
8. Verify strap length by attaching the strap to offender's ankle.

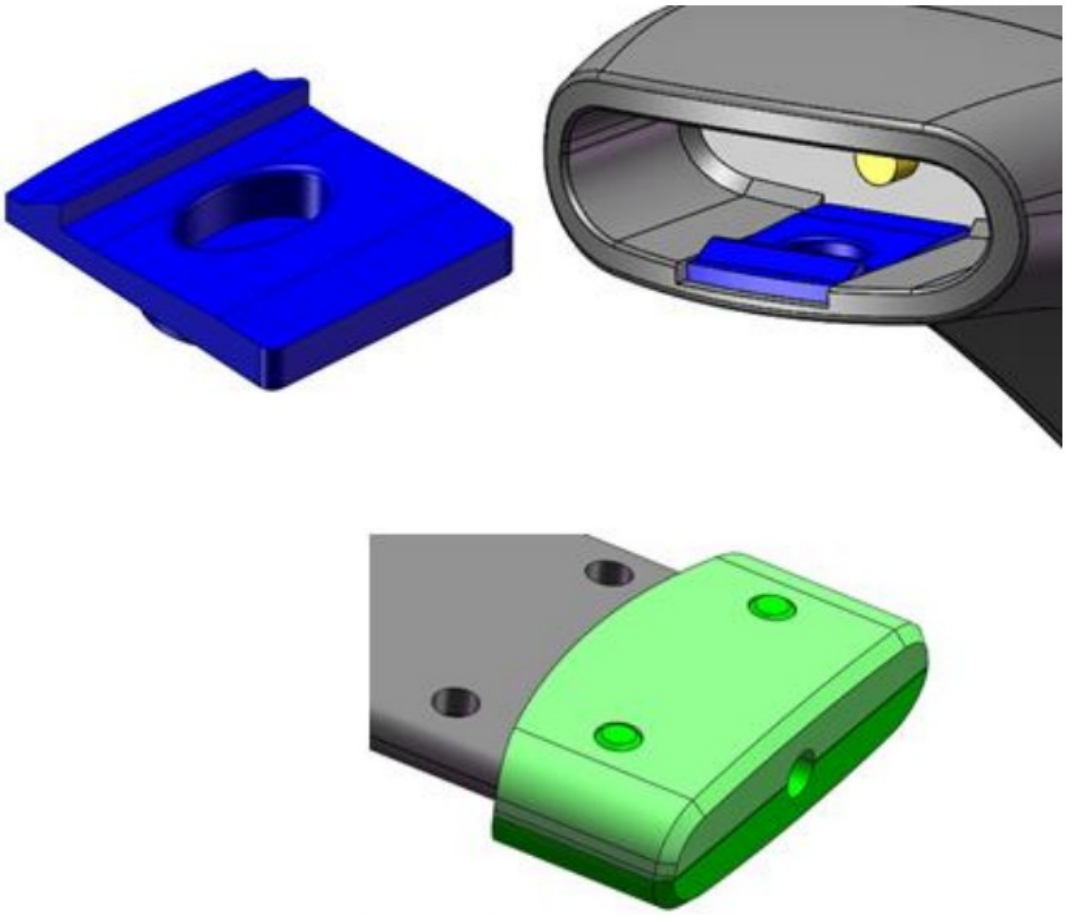


Rechecking measurement

9. If the strap fits:
   a. Attach the upper and lower strap buckles to the 2 nd end of the ankle bracelet strap.
   b. Insert the locking pin in the side of the Pure One body.







Inserting locking pin and strap

10. After the locking clip is inserted, attach the strap again around the offender's ankle and insert the strap into the Pure One base to lock it. You should hear a clicking noise. This indicates the locking of the strap.

Pure Beacon Installation Preparation

Verify that the beacon unit has a dual sided sticker on the back side. Then, position the unit on a flat table surface, preferably in the center of the premises (to provide the best coverage, similar to the House Arrest unit).

Pure Beacon Installation

For best performance, the unit shall be positioned on a table of a height of around 0.6 to 1.8 meters above floor level.

If possible, position the unit on a wooden or concrete surface and note that surfaces like metal, glass, mirror or tiles aren't suitable for the unit.

To reduce risk of interference, all electrical devices or large metal objects shall not be in immediate proximity to the Pure Beacon unit.

Furthermore, the unit shall be kept away from water, chemicals, drink or food preparation areas.

PureOne Removal

To remove the Pure One bracelet from offender's ankle perform the following:

1. Use the provided medical scissors to cut the band.
2. Save the Pure One bracelet and the band for re-use and recycling.

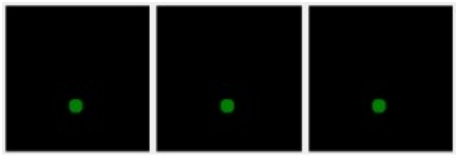
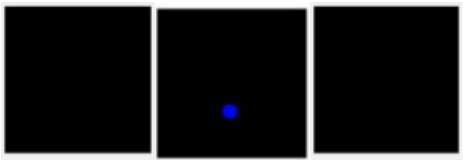
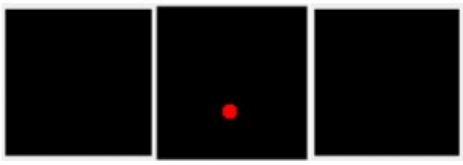
Cutting the strap for PureOne removal

Pure One Unit LED Interface

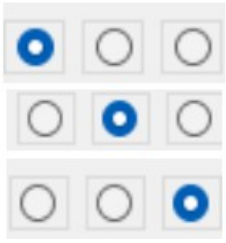
Introduction to Pure One Led interface
Both the Pure One device and the charger have LED's that serve as visual indicators. The PureOne device has a single LED light while the charger has 3.
The following table details each state and its corresponding LED sequence.

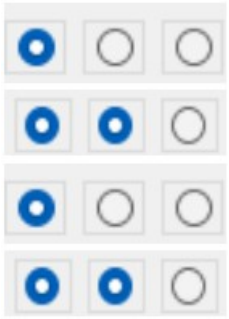
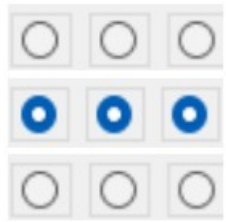
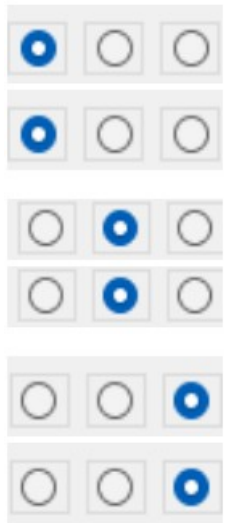
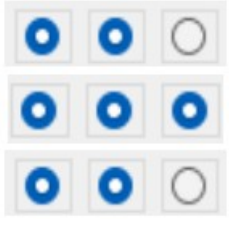
Pure One – 1 LED

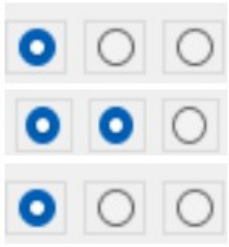
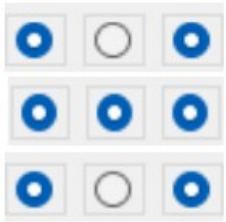
#	State	LED sequence	Sequence Image (Left to Right)
1.	Unallocated (monitoring inactive), valid communication cycle. Charger not connected. The unit is communicating with the server and its available for enrollment and monitoring.	Rapid double blink in yellow.	
1.	Unallocated (monitoring inactive), invalid communication cycle. Charger not connected. The unit has errors in communication with the server.	Rapid double blink in red.	
2.	Charger is connected – Pure One Battery Low (0%29%)	Slow blinking in red.	
2.	Charger is connected – Pure One Battery Medium (30%-69%)	Slow blinking in yellow.	

2.	Charger is connected – Pure One Battery High (70%-99%)	Slow blinking in green.	
2.	Charger is connected – Pure One Battery Full (99%-100%)	Static green.	
3	Monitoring active mode (charger is not connected).	Blinking in blue.	
4	Monitoring active mode — charger connected and charger battery insufficient to charge the PureOne	Does not affect LED state. For example, if PureOne device is allocated and charger is connected and doesn't have sufficient energy to charge, the LED would continue to blink blue.	
5.	Monitoring active mode — PureOne device battery is low (1%-20%)	Slow blinking in red.	
5.	Monitoring active mode — PureOne device battery is medium (21%-40%)	Slow blinking in yellow.	
5.	Monitoring active mode — PureOne device battery is high (70%-98%)	When battery is above 40 %, no indication is given by the LED's	

Charger – 3 LED's

#	State	LED sequence	Sequence Image (Left to Right)
1	Charger is connected to the wall — upon initial connection.	All 3 LED turn on and off sequentially	
1.	Charger is connected to wall — charger battery is between 0%-40%.	First LED blinking Second and third LED off	

1.	Charger is connected to wall — charger battery is between 40%-80%.	First LED static Second Led blinking Third Led off	
1.	Charger is connected to wall — charger battery is between 80%-99%.	First and second LED static Third LED blinking	
1.	Charger battery is full, and charger is connected to the wall.	All three LEDs blinking in unison rapidly	
2.	Charger is connected to PureOne — connection detected by the charger.	Each Led blinking twice sequentially	
2.	Charger is connected to PureOne — charger battery has depleted and now at 80%-99%.	First and second LED static Third LED blinking	

2.	Charger is connected to PureOne — charger battery has depleted and now at 40%-80%.	First LED static Second LED blinking Third LED off	
2.	Charger is connected to PureOne — charger battery has depleted and now at 0%40%.	First LED blinking Second and third LED off	
2.	Charger is connected to PureOne — charger battery is insufficient to charge PureOne.	All three LEDs blinking in unison slo wly	
3	Charger is not connected to the w all or to PureOne Charger battery i s fully drained.	All 3 LED’s are off	
4.	Error — voltage exceeds allowed li mit .	First and last LED are static Second LED is blinking	
4.	Error — no program running.	All three LED are static	

PureOne Radio Frequencies

Introduction to PureOne RF communication
PureOne uses the following RF technologies:

Cellular LTE
– Certified cellular module
– LTE coverage

Bluetooth Low Energy
– BLE 5.1 module
– Low power
– BLE module does not transmit any data while cellular communication is active

Wi-Fi
– Wi-Fi is used in Rx (reception) mode only.
– Wi-Fi purpose is for location aiding.
– Wi-Fi module does not work while cellular communication is active

Documents / Resources

	SuperCom PureOne Electronic Monitoring Solution [pdf] User Guide PRFPUREONE30, 2BAX3PRFPUREONE30, prfpureone30, PureOne Electronic Monitoring Solution, PureOne, Electronic Monitoring Solution, Monitoring Solution