

The below features and functionality of our robust product offerings demonstrate why Attenti provides the best product and best value to the Participating Entities.

Real Time Communication (RTC)

Attenti is pleased to offer the RTC. The RTC combines GPS, RF, Wi-Fi, and LTE voice and text messaging technologies into one modular solution. It provides real-time, two-way communication for an efficient monitoring system.

The RTC system is comprised of two primary components: the small RTC and the 2-Way Bracelet (BTX) attached around the participant's ankle. We also offer the optional Base Unit RTC for a tighter tether within the residence.



Key Benefits

- *Multiple Communication Methods* – the RTC offers two-way voice communication, text messaging, LED lights, vibrations, and audible alerts
- *2-Way Bracelet (BTX)* – designed to encourage compliance, the BTX can be set to vibrate to notify the participant of a potential range violation
- *Immediate Response* – allows participants to respond directly from the device
- *GPS, Wi-Fi, and Tower Based Tracking* – ensures continuous tracking, even indoors
- *LTE and Wi-Fi Communication* – delivers the most reliable coverage nationwide
- *Mobile Hotspot Detection and Connectivity* – Can now connect to and utilize mobile hotspots
- *Interference Detection* – provides cutting edge technology with the widest array of interference detection in the industry
- *Pursuit Mode* – turns on real-time tracking
- *Onboard Processing* – furnishes immediate alert notifications
- *Data Backup* – stores more than 30 days' worth of data in nonvolatile memory

LTE and Wi-Fi Communication

Despite offering cellular communication on the nation's largest and most widely used carriers, there are still areas and environments that simply do not have strong cellular coverage. Attenti was the first company to offer a Wi-Fi data communication solution. Utilizing Wi-Fi and LTE communication over the AT&T and Verizon networks, the RTC offers the most reliable coverage nationwide.

Mobile Hotspot Detection and Connectivity

If adequate cellular service and Wi-Fi networks are unavailable, the AT1 will connect to and utilize mobile hotspots to transfer data.

Interference Detection

The RTC offers cutting edge technology with the widest array of interference detection in the industry: cellular jamming, GPS jamming, device shielding, and a 9-axis motion detector. Participants may try to block the device, but the RTC is designed to monitor and alert on any interference attempt.

Multiple Tracking Technologies = Accurate Location Points

Global Positioning System (GPS)

Within the GPS performance standard, Attenti maintains the highest degree of accuracy. Our devices are equipped with the latest GPS technology, including autonomous GPS, assisted GPS, and firmware that detects and filters out poor satellite signals. The devices accept and process only reliable solutions, providing accurate GPS location points.



Location Based Services

Attenti offers Location-Based Services (LBS) as a secondary means of tracking participants when a device is inside. If the GPS signals are poor or unavailable, the RTC begins to track the participant using public Wi-Fi access points and cellular towers.

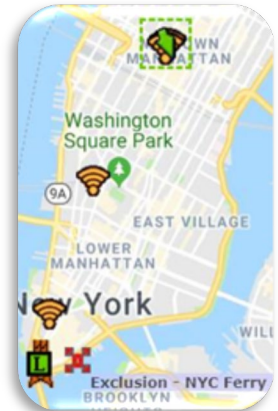
- **Wi-Fi Tracking.** By default, the device will attempt to acquire Wi-Fi access points first.
 - If at least three Wi-Fi points are in range, a location point will be stored and displayed on the map.
 - The most recent Wi-Fi location point will be surrounded by an orange circle. The radius of the circle indicates the approximate location of the participant.
 - The RTC will continue to store and display Wi-Fi location points every 3 minutes.
- **Tower-Based Tracking (TBT).** If the device is unable to locate viable Wi-Fi access points after 2 minutes, TBT is initiated. TBT will store and display a location point with a cellular tower icon.
 - When TBT is active, the device will continue to scan for GPS and Wi-Fi access points.
 - TBT points are stored and displayed when there is a status change, including a new tower in range.



One Integrated Map

GPS, Wi-Fi, and TBT are integrated into one EM Manager map; there is no need to select one map for GPS points, another for Wi-Fi points, and a third for TBT points. The icons appear based on the type of location point gathered at a particular moment in time.

In the example to the right, when Mr. Jones enters the southern Battery Park subway station in New York City, the RTC goes into Location Based Tracking – marked with an L – and picks up a TBT point. Wi-Fi access points are available at the next three subway stations to triangulate position, and an arrow displays GPS location and heading when he leaves the subway in midtown Manhattan.



While we understand not all areas have vast subway systems, this technology proves useful when tracking participants through shopping malls, office buildings, big box stores, and parking garages.

Real-Time Tracking

Download Points, On Demand

*Attenti actively monitors in near-real time, providing users with the capability to download GPS points and monitoring data on demand, without waiting for the device's next scheduled call. In response to the *Download Points* command, executed with the click of a button in our software, the system contacts the device, forcing an automatic download of GPS points with tracking and monitoring information.*



Pursuit Mode

Pursuit Mode enables the Attenti system to go into real-time tracking. When in Pursuit Mode, the device will collect a GPS point every 15 seconds and will call in once every 30 seconds for a user-specified duration (5 minutes, 15 minutes, 30 minutes, or 60 minutes).



Communication

The RTC goes even further than our other devices in providing multiple technologies for communicating with participants in real time: text messaging, LED lights, vibrations, audible alerts, and optional two-way voice communication. When an alert is detected the RTC notifies the participant with these multiple signals until the participant acknowledges the alert or receipt of the message by pressing the appropriate key. A record of both the alert and the acknowledgement is stored in our database, as well as in the RTC itself.

Optional Two-Way Voice

Real time voice communication with participants is a valuable tool that can save time over the life of a contract by reducing officer workload. The built-in cell phone enables the device to establish a two-way voice dialogue between the agency and the participant for an immediate alert investigation, to obtain verbal location confirmation, to schedule a meeting or appointment, or to provide instruction.

Utilizing our web-based EM Manager software, officers can also create an outbound call list for the participant. The device can call up to five agency-approved phone numbers such as the officer or a treatment center. Authorized call lists are at the discretion of the supervising agency.

Text Messaging

Alert Notification

Text messaging to the participant via the RTC is a powerful communication tool providing automatic notification of an alert. Since the RTC stores its rules onboard, the device processes the alerts independently of server communication. For example, if a participant is in an area that is off limits (exclusion zone), the participant automatically receives a text message with instructions to correct the behavior.

Standard and Custom Messages

Officers can create both standard and custom messages in EM Manager by choosing from a pre-defined message list or by creating a custom message. By utilizing the *Send Device Message* function, the communication can be sent to the device immediately or scheduled for a later delivery date and time.

Another convenient feature of the system is that when an alert notification is sent to an officer's cell phone, the officer needs only to *Reply* and the cell phone can be used to compose a text message to the participant's RTC. The text is routed through our server so that a record of the communication is both recorded and forwarded to the RTC.

Onboard Processing

The RTC is an autonomous GPS device that stores all rules in memory. *The device samples GPS every second and the computer processor compares that data instantaneously with the onboard rules.* The RTC quickly detects geographic noncompliance and automatically increases its point collection rate to 15 seconds, at the same time notifying the participant of the alert and calling our server to download both the alert information and the tracking data. By doing so, the device generates alerts for noncompliance faster than other devices.

Example

Device A does NOT have onboard processing. It is designed to call in once every 15 minutes. A participant enters an exclusion zone:

- *Device A* could take up to 14 minutes, 59 seconds, until its next scheduled call, to detect, record, and report the alert; the device does not go into alert or notify the participant until it calls in and the server processes its GPS position against the participant's rules and initiates the alert status. This delay could result in the notification being generated 15 minutes or more after the event, to both the participant and the agency.

The RTC (*Device B*) WITH onboard processing is designed to call in once every hour, and automatically upon violation. A participant enters an exclusion zone:

- *Device B* automatically detects and records the alert, notifying the participant (if selected), increasing GPS point collection to every 15 seconds, and immediately initiating a call to report the alert to the agency.

The Benefit

Onboard processing is a valuable tool for encouraging the participant to modify their behavior. Without onboard processing capability, a device does not know it is in violation and does not notify the participant until it is able to contact the server and receive the information that it is noncompliant with the rules.

With onboard processing, the participant is aware that they are not in compliance earlier and can act to correct the situation. Additionally, the agency is notified of an alert much earlier when the GPS device has onboard processing.

Onboard Storage and Nonvolatile Memory

The RTC stores more than 30 days' worth of data in nonvolatile flash memory in the event of an interruption of communication. Nonvolatile memory is computer memory that is stable and not prone to change; it persists even when not powered. The data storage is permanent; when communication is restored, the device automatically calls in to download its data.

2-Way Bracelet (BTX)

The 2-Way Bracelet (BTX) is our latest and most sophisticated bracelet transmitter with the capability to notify participants of range and curfew violations with short bursts from its vibration motor: an effective tool to encourage compliance.

Small and discreet, the BTX weighs just 1.7 ounces. The BTX is attached around the participant's ankle with a strap that is easily cut to size. No specialized keys or fobs are required for installation; simply connect the strap and the BTX activates. The strap contains an embedded fiber optic light pipe through which an IR signal is transmitted.



One of the unique features is that it provides a 30-day notice of impending battery depletion, allowing agencies to arrange for bracelet replacement during a regular office visit. The unit transmits an encoded signal every 20 seconds, picked up by the RTC and the Base Unit 3000, to verify its proximity.

Vibration Feature (Optional)

The 2-Way Bracelet offers the optional vibrate feature designed to eliminate or minimize curfew alerts. When turned on, the Participant is notified they are out-of-range one (1) minute before a Curfew Alert will be sent to the Parole Officer or the Command Center. The optional bracelet vibration provides the Participant the opportunity to immediately correct non-compliance.



Adjustable Range

The range settings of our BTX are adjustable. During the enrollment process, our EM Manager software allows the user to select a variable range of Low, Medium, or High. The ranges are approximate, as they are dependent on environmental conditions, but an Equipment Range Test is also available to help determine the correct range for the residence.

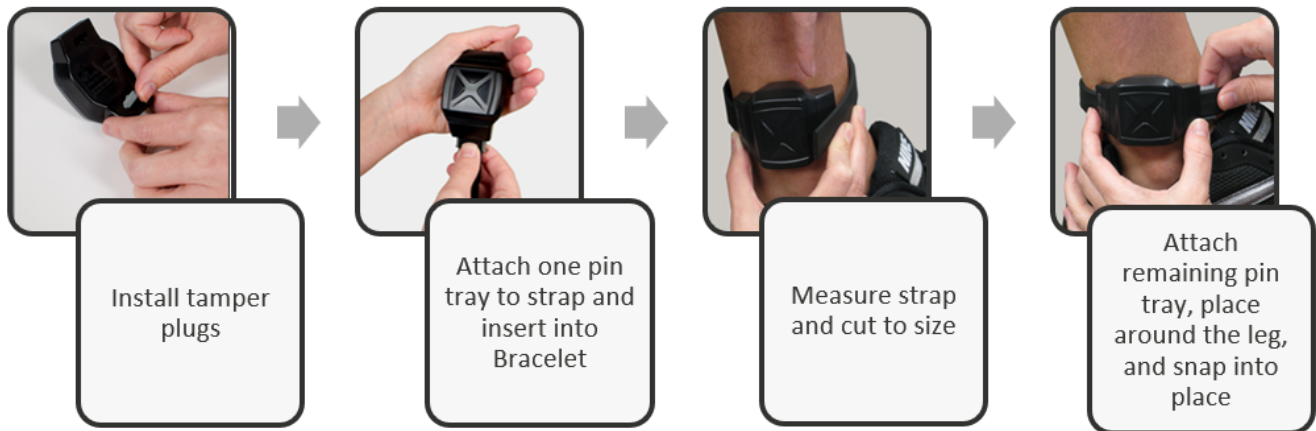
Tamper Detection

The BTX is attached around the participant's ankle with a disposable strap that contains an embedded fiber optic light pipe. An IR signal is transmitted through the fiber optic pipe. An interruption in the signal results in a *Bracelet Strap* alert. If the housing is compromised, a *Bracelet Case Tamper* alert is generated. Our BTX is designed to detect tamper attempts; if our equipment generates a strap or case tamper alert, it needs to be inspected and swapped.

The BTX comes with two tamper plugs that must be inserted into the back of the bracelet brackets. Any unauthorized attempt to remove them leaves obvious signs of tampering. The plastics around the brackets are also smooth so that attempts to tamper with the BTX are readily apparent.

Sizing and Installing the BTX

Our bracelet installation was developed to be simple and fool proof. For example, the transmitter can be placed on either leg but the components that connect the strap to the BTX can only be installed in one direction. Once trained, an officer is able to install a BTX within minutes and a strap cutter or pair of scissors is the only tool necessary for installation (no keys, FOBs, or pliers). Follow the steps below:



Enhanced Strap Design

The strap contains an accurate fiber optic circuit through which a coded infrared signal is transmitted multiple times per second.

- Attenti has patented a light-focusing technology that maximizes our ability to detect strap tampers.
- An internal copper wire embedded in the strap aids in stretch resistance and durability.
- The strap, pin trays, and tamper plugs have been designed to reveal tamper attempts.
- Composed of materials certified safe for use in prolonged skin contact applications, the strap contains no mineral, nickel, or other materials known to cause allergic reactions and does not interfere with normal limb movements.

Base Unit RTC

The optional Base Unit RTC, Attenti's advanced RF monitoring unit, is used in conjunction with the RTC to provide a tighter tether in the home and to provide an additional communication option. Fitting right in with our integrated suite of products, it communicates via landline and has a proven, rugged design. It utilizes a low power RF receiver to listen for the encoded signal from our BTX and a battery that provides 48 hours of backup power, allowing it to continue communication with our system as normal, even in the absence of an AC power connection.

The Base Unit RTC provides participants with mobility to move around the residence. In addition to the case tamper detection, the device also monitors the phone line and the power line, providing notification of these events and more. The system expects each unit to call in at a prescribed interval; if a Base Unit RTC misses a call, the system recognizes it as a potential tampering and reports the missed call.

The base unit typically downloads data every six hours and automatically upon an alert. It also stores a minimum of 30 days of monitoring data in nonvolatile memory. Landline communication is compatible with standard and VoIP telephone services.

If the phone line is in use when our Base Unit RTC tries to contact our server, the device alerts the user to yield the line in two ways: a beeping noise that can be heard on the phone line and a blinking *Line* light on the front of the device itself. It continues trying to call in until it succeeds.

Tamper Detection

Built with tamper detection in mind, the Base Unit RTC generates a *Base Unit Tamper* alert with notifications per agency protocols on an attempt to open the case. The rule default is not to notify Participants on tamper alerts, but the data is recorded and notification is generated and reported to the agency.

Alerts

All alerts recorded by the RTC are time/date stamped and downloaded to our central computer system. The RTC records and notifies on the following:

Inclusion Zone: The RTC is not in the required zone during the scheduled time.

Exclusion Zone: The device is within an area that is out-of-bounds.

Bracelet Gone: The transmitter is out of range of the RTC.

Bracelet Strap: The connection between the bracelet and strap has been interrupted.

Cellular Jamming: A signal has interfered with the cellular modem.

GPS Jamming: A signal has interfered with the GPS receiver.

Shielding: The device detects shielding.

Motion No GPS: The device is in motion in the absence of GPS.

Tamper: The RTC housing has been opened or damaged.

RTC Unable to Connect: The scheduled call to the Attenti system was unsuccessful.

RTC Battery: The RTC needs to be charged within the hour.

In Charger: The RTC is not charging as scheduled.

Bracelet Battery: The BTX battery is getting low; it has approximately thirty days of battery life remaining.

When used in conjunction with the Base Unit, additional alerts include:

- *Base Unit A/C Power Disconnected:* The power is disconnected from the base unit.
- *Base Unit Battery:* The back-up battery power is low.
- *Base Unit Phone Line Disconnected:* The phone line was disconnected from the Base Unit.
- *Caller ID:* The Caller ID number does not match the participant profile caller ID in EM Manager.
- *Base Unit Tamper:* The Base Unit housing has been opened or damaged.
- *Base Unit Unable to Connect:* The scheduled call to the Attenti system was unsuccessful.

Specifications

Two-Piece Tracking Device System		
Real Time Communication (RTC)		
Model	RTC LTE V	
Part Number	064000006	
Dimensions	5.9" High x 3.25" Wide x 0.9" Thick	
Weight	8.5 ounces	
FCC ID	CDMA: NC3-24014VL	
Battery Recharge	2 hours	
Battery Life	> 24 hours	
Water Resistance	Resistant to hard rainfall and short periods of immersion in water	
Operating Temperature Range	-20°C to +60°C	
Stored Temperature Range	-20°C to +60°C	
Humidity Range	30% to 80%, non-condensing	
Nonvolatile Memory	> 30 days	
Communication Methods	Text, LED Lights, Vibration, Audible Alerts, Voice	
2-Way Bracelet		
Model	BTX 4433	
Part Number	002800007	
Dimensions	2.95L x 0.97H x 1.91W inches	
Weight	1.7 ounces	
FCC ID	LSQTRX900F2	
Battery Life	12 months in operation; 3-year shelf life	
Water Resistance	Waterproof per IP68 standard, up to 66 ft	
Operating Temperature Range	-20°C to +71°C	
Stored Temperature Range	-40°C to +71°C	
Temperature cycling	-25°C to 40°C	
Humidity Range	95% from 25°C to 55°C	
Communication	Vibration	
Base Unit RTC		
Model	Base Unit RTC LL	
Part Number	062310076	
Dimensions	7.25L x 3.5H x 10.25W inches	
Weight	33.2 ounces	
FCC ID	LSQ-SBU2000433-2	
Backup Battery Life	> 48 hours	
Memory	> 30 days	
Operating Temperature Range	-20° to +55° C	
Stored Temperature Range	-40° to +55° C	
Humidity Range	93% at +40° C	