Placement, Installation, and Networking Best Practice

Parameter	Value
Ethernet	
Connection Speed	10/100 Mbps
PoE Support	IEEE 802.3at Class 3 Compliance) input and output
Power Draw	
Power Consumption	5W (Typical) 8W (Max)
Voltage Range	12 V DC, PoE
Networking	
Protocols	IPv4, IPv6, HTTPS, DHCP, TCP, RTSP, Onvif, MQTT
Wireless	2.4 GHZ IEEE 802.11 b/g/n/ac Wireless
Bandwidth	
Max Mitrate	2 Mbps
Streaming Resolution	1080p, 30 fps (Adjustable on VMS)
Compression Format	H.264

Running Ethernet: Home Runs and Daisy Chain

Quick Info:
- PoE (IEEE 802.3at Class 3 Compliance) input and output.
- Tether up to 4 devices together using PoE daisy-chain
- Cat 6 cable recommended using a PoE+ or PoE++ switch
- Home runs for secluded sensors
- Daisy-Chain sensors in the same area

Connecting your Triton ULTRA sensors to power and data through Cat 6 networking cable is the most reliable way to install your sensors and ensure their functionality. To mitigate installation time, costs, and cable used, we recommend that you daisy-chain nearby sensors to each other using the respective PoE In and PoE Out ports on each sensor.

Quick Reference

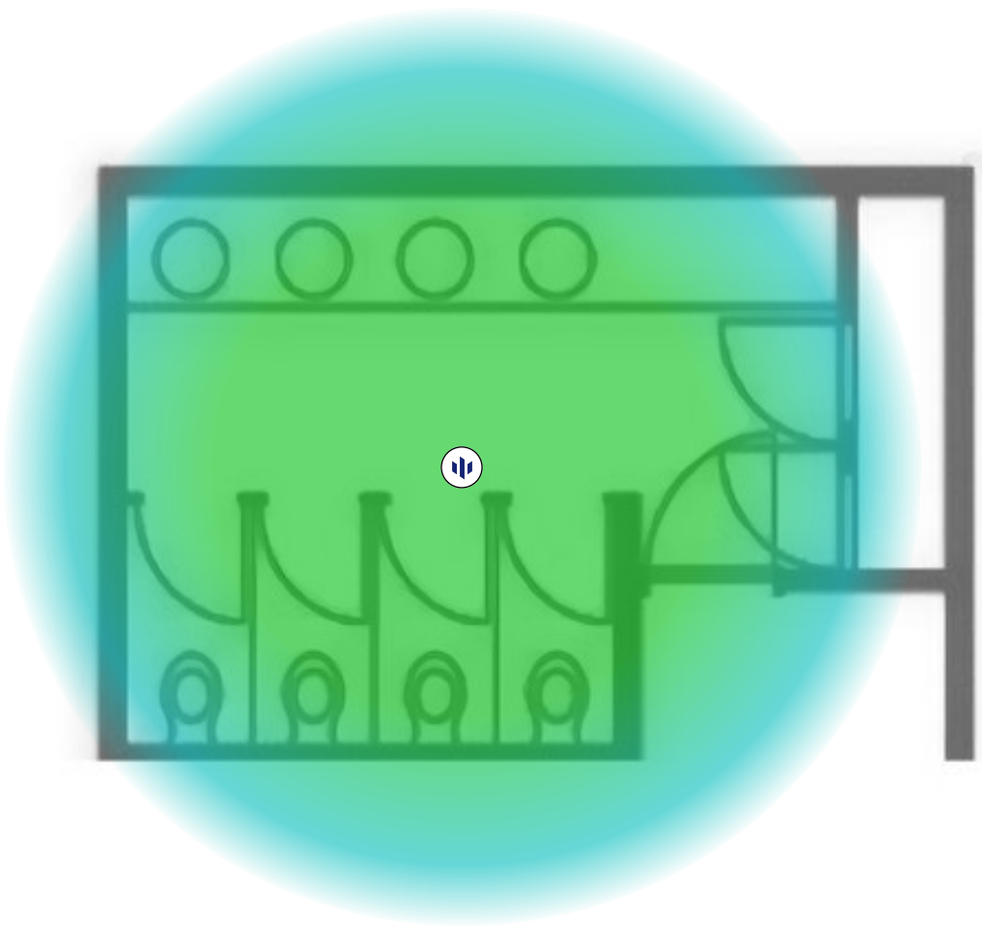
- Power via PoE or 12 V DC Power (PoE Recommended)
- Network Connection via Ethernet or WiFi (Ethernet Recommended)
- Cat 6 Cable Recommended
- Save time and cable by connecting up to four sensors together with POE Daisy Chain
- Install one to two devices depending on room size, air flow, and required response time
- Install away from obstructions, HVAC vents, open windows, air purifying sprays, and other sources of airflow disruptions

Device Placement Best Practice

When planning device placement, take the following into account:

- Coverage range for each sensor (assumes 8.5 ft high ceiling)
  - Nicotine and THC Vape: 150 sqft (optimal) 226 sqft (maximum)
  - Loitering and People Counting: 169 sqft (13′ x 13′ square)
  - Keywords: 256 sqft (no obstructions or crossnoise)
  - Cloud Audio Analytics: 144 sqft (no obstructions or crossnoise)
- Place away from HVAC exhausts, windows, and other airflow disruption sources
- Avoid placement near automatic air freshener sprays
- Obstructions such as cornered walls can impact range and response time
- The further away the vape, the longer the alert will take
- Larger rooms or rooms with obstructions may require two sensors for maximum coverage

Coverage Diagrams



Single Sensor Placement

- 144 sqft reference room
- Placed near the center of the room to cover drug use, loitering, keywords, and more.
- Device centered towards the highest foot traffic part of the room for the quickest response time
- Not placed near HVAC vents to avoid airflow disruptions

Multi Sensor Placement

- 225 sqft reference room
- Sensors cover the entire room with small overlap
- Sensors overlap in high foot traffic areas for quick and accurate coverage
- Sensors daisy-chained together for high efficiency