



Triton Sensors

## **Triton ULTRA Smart Sensor**

### **Division 28 - Electronic Safety and Security**

#### **Section 28 30 00 - Intrusion Detection and Electronic Surveillance**

Triton ULTRA is an industry-leading smart sensor that detects sixteen metrics and can infer multiple event types using onboard artificial intelligence. Triton's advanced features provide unprecedented situational awareness in private spaces like bathrooms, locker rooms, and patient rooms where traditional cameras are not permissible. Triton ULTRA also captures and stores advanced intelligence like crowding level, chemicals, and more for advanced business intelligence.

## **Part 1 - General**

### **1. Summary**

- o This section includes specifications for the Triton ULTRA multi-function health, safety, and drug detection device.

### **2. References**

- o Comply with relevant standards such as the Institute of Electrical and Electronics Engineers (IEEE), FCC, CE, RoHS, and UKCA.

### **3. System Description**

- o Provide a complete and fully functional multi-function sensor system for health, safety, and drug detection, including devices, power supplies, mounting hardware, and associated accessories.

### **4. Submittals**

- o Product Data: Submit manufacturer's product data sheets for all components.
- o Shop Drawings: Provide layout drawings showing the placement of all sensors and equipment.
- o Operation and Maintenance Data: Submit complete operation and maintenance manuals for all installed equipment.

## Part 2 - Products

### 1. **Manufacturer**

- o Triton Sensors

### 2. **Model**

- o Triton ULTRA

### 3. **Sensor Specifications**

#### o **Functions:**

- Vape & THC Detection
- Emergency Keyword Detection
- Decibel Aggression Detection
- Decibel Level Monitoring and Threshold Alerts
- AI Scream & Shout Detection
- Gunshot Detection
- Glass Break Detection
- Loitering Detection
- Motion Detection
- People Counting Up to 11 People
- Bluetooth Crowd Estimation (up to 100 people)
- Health Index Monitoring
- Air Quality Monitoring Index Monitoring
- Chemical Monitoring and Thresholds
- TVOC, CO<sub>2</sub>, NO<sub>2</sub>, CO, HCHO, PM<sub>1</sub>, PM<sub>2.5</sub>, PM, PM 10
- Temperature and Humidity Monitoring and Thresholds
- Tamper Detection
- 6 Month On-Device trend monitoring data
- 6 Month of On-Device Event Data Storage
- Supports communication via TCP, HTTP, and MQTT Data
- Integrates with 3<sup>rd</sup> Party Software Including Video Management Systems (VMS) and Notification Systems
- Displays alarm and measurement data in a Real Time Streaming Protocol (RTSP) stream
- ONVIF Profile S Compliant
- Supports DHCP and Static IP
- Compatible with Triton Cloud
- Configurable multi-color LED Light
- Speaker With User-Customizable Messages
- Daisy-Chain Up To Five Devices Together for Power and Data with PoE+ and CAT6 Cables

#### o **Communication and I/O:**

- Ethernet In: RJ-45 (10/100 Base-T)
- Ethernet Out: RJ-45 (10/100 Base-T), IEEE 802.3at Class Compliance
- Wireless: 2.4 GHz IEEE 802.11 b/g/n/ac
- 12V DC Input
- Bluetooth: Bluetooth 5.0, BLE
- Protocols: RTSP, IPv4/IPv6, TCP, MQTT, HTTP, HTTPS, DHCP, ONVIF

- Relay: Supports relay input and output to interface with external hardware
- **Power Supply:**
  - Power over Ethernet (PoE), IEEE 802.3at Class 3 Compliance
  - Daisy Chain: Connect up to five devices in a single cable run
  - 5W Typical Operation
- **Operating Conditions:**
  - Temperature: 32°F - 112°F (0°C - 44°C)
  - Humidity: 0 to 90% Relative Humidity (non-condensing)
- **Dimensions:**
  - 5.5" x 1.96" (140 mm x 50 mm)
- **Mounting Options:**
  - Surface Mount (recommended)
  - Wall Mount via Stud
  - Pole Mount
- 4. **Software Compatibility**
  - Triton Device Manager Windows Application: On-premise enterprise management software for device management
  - Triton Cloud: Cloud software for extended capabilities and multi-device reporting
  - Integrations: Compatible with various third-party VMS and safety systems, including Milestone, Genetec, Hanwha Wave, Video Insight, Raptor Technologies, Axis Camera Station, and more.
- 5. **Alert and Notification Features**
  - **Alert Light:** Customizable light sequences for different alert types
  - **Speaker:** Speaker with pre-configured sounds and user-programmable sounds
  - **Notifications:** Email and SMS text message alerts via SMTP server or API
  - **Triton App:** Receive Push Notifications Through the Triton iPhone and Android App
  - **3<sup>rd</sup> Party Alerts:** Receive Notifications in 3<sup>rd</sup> Party Software and Hardware

## **Part 3 - Execution**

### **1. Installation**

- o Install the Triton ULTRA sensors in accordance with the manufacturer's instructions and industry best practices.
- o Ensure all sensors are properly positioned to cover the required detection areas.

### **2. Testing and Commissioning**

- o Perform system testing to verify proper operation of all sensors, network connectivity, and power supply.
- o Provide a functional test report confirming that the system meets all specified requirements.

### **3. Training**

- o Provide training to the owner's personnel on the operation and maintenance of the Triton ULTRA sensors.

### **4. Warranty**

- o Provide a minimum ten-year warranty on all installed equipment and labor.