



The start of something new

WG Bubble

Technical Specification Sheet

Overview

The WG Bubble is an overhead RF-based Surveillance system engineered to create a 360° volumetric detection field (“bubble”) at store exits and isles.

Operating Technology

- **Technology Type:** Radio Frequency (RF) EA
 - **Operating Frequency:** RF
 - **Modulation:** AM (Amplitude Modulated) signal transmission
 - **Detection Method:** Resonant frequency disturbance of smart tags
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Detection Performance

- **Detection Zone Shape:** 360° volumetric field (cylindrical/conical depending on mounting height)
- **Typical Detection Coverage:**
 - **Width:** Up to 100 feet per unit
 - **Depth:** Up to 100 feet
 - **Height Coverage:** Floor level to mounting height
- **Tag Compatibility:**
 - WG RF hard tags
 - WG AM hard tags
- **Detection Rate:** Optimized for high detection with low false alarm rates when installed per guidelines



Mounting & Installation

- **Mounting Type:** ceiling / overhead installation
 - **Recommended Mounting Height:**
 - **Minimum:** (8 to 10 ft)
 - **Optimal:** (9 – 12 ft)
 - **Maximum:** (15ft) depending on site conditions
 - **Placement Guidelines:**
 - Centered above store exit/entry/isle
 - Avoid proximity to large metal structures or electrical interference sources
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System Components

- WG Bubble antenna unit (transmitter/receiver integrated)
 - Power Supply (one per Bubble unit)
 - Control/interface module (if required for system configuration)
 - Optional integration with store alarm systems
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Electrical Specifications

WG Bubble Unit:

- **Input Voltage:** 24V DC (via SPS-24)
- **Power Consumption:** Typically < 50W per unit

WG SPS-24 Smart Power Supply:

- **Input Voltage:** 230V AC
 - **Current Rating:** 16A
 - **Fuse Type:** 16A slow blow
 - **Connection:** Terminal box
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RF Environment Considerations

- Performance may be affected by:
 - Metal fixtures near the detection zone

- Electrical noise/interference
 - Reinforced concrete or dense structural materials
 - Site survey recommended prior to installation for optimal tuning
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Accessibility & Serviceability

- Each Bubble unit requires a dedicated SPS-24
 - SPS-24 units must be installed in an **accessible location** to allow store staff to:
 - Disable the system if necessary
 - Perform power cycling/reboots in case of malfunction
 - Supports rapid troubleshooting without requiring ceiling access
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Environmental Specifications

- **Operating Temperature:** 0°C to 40°C (32°F to 104°F)
 - **Humidity:** Up to 90% non-condensing
 - **Application:** Indoor retail environments only
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Key Advantages

- Fully concealed EAS solution with no floor-mounted pedestals
 - Uniform detection field across wide exit openings
 - Improved customer flow and store aesthetics
 - Scalable for multi-exit and wide-format store designs
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Summary

The WG Bubble system leverages RF technology to create a controlled overhead detection field, delivering strong performance without traditional antennas. When installed within specified mounting heights and environmental conditions, it provides consistent, high-efficiency loss prevention with minimal operational disruption.