xSpan RFID gate with motion detection of UHF tags in arrea

RFID revolution in item monitoring! The xSpan Gateway is a fixed infrastructure RAIN RFID reader system that provides always-on monitoring and movement detection of tagged items. Ideally suited for spaces such as hospital and conference rooms, mid-size retail spaces, hallways and portals.

Improve item visibility. The xSpan Gateway is a high-performance RAIN RFID reader system with an integrated phased array antenna. The phase array antenna supports 13 beam angles each with horizontal and vertical polarization for a total of 26 selectable beams. Each beam can be either horizontally or vertically polarized. An on-board processor controls the beam direction, orientation and polarization. The system has the capability to steer its antenna beam along a single axis to read RFID tags over a rectangular area and detect item movement. The gateway can be mounted on a ceiling or a wall

Movement tracking and item identification empowers loss prevention systems, entry and exit event detection, and other portal and tag direction applications that require bi-directional movement monitoring.

Key features:

- Continuous, Hands-free Monitoring
- Monitor inventory and track item movement along a single axis
- A single xSpan gateway provides up to 93 m2 coverage within a rectangular area
- Expand coverage area with additional xArray or xSpan Gateways
- Low-profile and light-weight integrated system designed for easy installation on both ceiling and walls
- Power and control through a single power over Ethernet (PoE) connection

Technical Description

Functionality & Operation

Frequency	UHF: 865 - 868 MHz (EU)
Antennas, Antenna inputs	polarized
Communication interface	Ethernet RJ-45
Configuration	ItemSense, Speedway Connect, Octane Software Development Kit (SDK), Octane Embedded Tool Kit (ETK), EPCglobal Low Level Reader Protocol (LLRP) Tool Kit (LTK)
Signal coverage	93m2
RFID transponder protocols	RAIN RFID: EPCglobal UHF RFID Class 1 Gen2v2 / ISO 18000-63

Optical

Scanning rate	1100 tags/s

Mechanical

Dimensions	Width: 220mm, Height: 480mm Length: 90mm
Weight	3.4kg

Environment

Operating temperature	-20 to 50°C
Storage temperature	-20 to 50°C
Operating humidity (non-condensing)	0 to 95%
Ingress protection	IP50

Others

Certifications	RoHS
Development tools	Octane SDK (.NET and Java), LTK (C, C++, .NET, Java), ETK (C, C++)
Application software	ItemSense, Speedway Connect, Octane Software Development Kit (SDK), Octane Embedded Tool Kit (ETK), EPCglobal Low Level Reader Protocol (LLRP) Tool Kit (LTK)