

The NeWave™ Surround Portal

Introducing An Innovative Structure for Maximum Power Density Reads

Summary

The NeWave Wave™ portal was designed to bring a new level of RFID read accuracy for tightly packed items like dry or wet towels, apparel, pharmaceuticals, documents, and linens. Most traditional methods of reading densely packed RFID tagged items require large number of patch antennas and readers, with specific RFID tag orientation, and still don't provide 100% accuracy. NeWave's research found that by using special composite plastic panels and our unique Wave antennas on the structure's ceiling, we could provide a uniform read performance for all RFID tag orientations throughout the structure. By closing the panels



with a metalized curtain, the Surround Portal takes advantage of the highest allowable power density to provide optimal RFID read performance.

We tested this concept at one of the world's leading hotel chains to improve the effectiveness of reading their towels that had an embedded UHF RFID tag. The accuracy of our Surround Portal was beyond their expectations.

How does that benefit you?

- The NeWave Surround Portal provides the flexibility to install anywhere...at the loading dock, on the conveyor, in the distribution center.
- The NeWave Surround Portal provides the confidence to tackle the most challenging to read RFID items.
- Provides a method of improving your inventory accuracy...one of the primary reasons for making an investment in RFID.

The NeWave Wave™ Surround Portal

- Flexible. Comes in various sizes
- Controls extraneous reads.
- Installs easily.
- Meets all FCC requirements.
- Uniform read performance and data accuracy.
- The NeWave portals work with any Gen 2 UHF reader.
- These portals utilize the patented Wave antennas that provide advanced UHF coverage.
- These built-in antennas won't go out of adjustment. You can be assured of consistently superior read accuracy.



NeWave Sensor Solutions Innovation Center

9011 Heritage Drive
Plain City, Ohio 43064
888.677.7343
sales@newaverfid.com
www.newaverfid.com

Specifications



Product/Part Number	NSS Wave-Surround 1
Portal Dimensions	Standard size is 4x4x8 feet Custom sizes can be price quoted
Weight (without reader)	Each unframed wall is 30 lbs.
Portal Wall Construction/Material	Exterior Cover: Corrugated Polyethylene Middle Layer: Aluminum Foil Interior Cover: Corrugated Polyethylene Frame: Galvanized metal
Cover Options	Neutral white (paintable)
Frequency Range	902-928 MHz
Operation Temperature for Indoor Environments	-4°~140°F (-20°~60°C)
Door Cover Material	Metalized Curtain is standard. Other options available.
Ceiling Cabling and Antenna Options	Four Wave™ antennas and cables sold separately
Reader Compatibility	Any UHF Gen2 Reader

About NeWave

NeWave Sensor Solutions is a leading provider of optimized solutions for today's most challenging item-level Radio Frequency Identification (RFID) problems. The company develops an open RFID technology platform based on the patented Wave™ antenna that sets a new standard for accuracy, versatility and efficiency. NeWave's core technology was developed by the world-class ElectroScience Laboratory (ESL) of The Ohio State University, a pioneer in RF research and development, and is produced in partnership with Wistron NeWeb (WNC), the Taiwan-based global leader in antenna manufacturing. The company's management team leverages a strong heritage in the RFID and retail industries for its mission of applying optimized solutions to today's greatest RFID challenges.



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