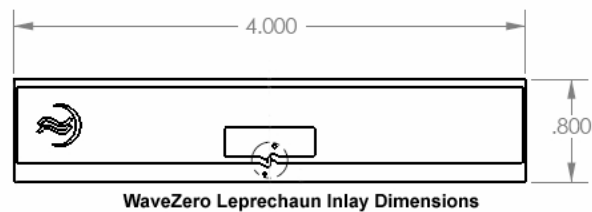


LEPRECHAUN INLAY SPECIFICATIONS OVERVIEW

- **Compliant to ASTM D 4169, loose cargo, commercial temperature and vibration levels. Suitable for corrugated, cardboard boxes and polymeric containers**
- **RoHS compliant**
- **Available in high yield dry rolls that easily integrate in high volume conversion processes**
- **Completely passive operation mode**
- **100% tested with non compliant inlays visibly marked**



Communication Protocol and Memory Specifications:

Operating Frequency Band:	902Mhz - 928Mhz
Wireless Communication Protocol:	EPC Generation 2, ISO 18000-6C
Protocol Class:	Class 1, 2
Component Used:	ST Micro XRAG2
Useful Memory:	432 bit configurable read and write
Memory Configuration:	3 memory banks: 64 bit TID, 304 bit EPC, 64 bit reserved 4 memory banks: 128 bit user, 64 bit TID, 176 bit EPC code, 64 bit reserved
Protocol Functions:	Multi-session Anti-collisions Inventory, read, write, erase, kill
Programming time:	100msec max for 288 bit EPC code



Radio Frequency Specifications:

Operating Frequency Band:	902Mhz - 928Mhz
Reading Range:	Better than 14' in free-space propagation and 36dBm EIRP at the reader antennas measured on corrugated cardboard boxes
Circular Cross Polarization:	Better than 2dB measured with 6.5dBi gain circular patch antennas
Mode of Operation:	Passive, backscattering modulation

Environmental Specifications:

Operating Temperature Range:	-40°C to + 65°C less than 95% humidity
Storage Temperature	-40°C to + 85°C less than 95% humidity

Dry Inlay Specifications

Substrate:	PET Melinex 516 Slip pre-treated
Substrate Thickness:	3 mils
Metal Layer:	Aluminum 99.8% pure
Overall Dimensions:	4" length, .8" height
Packaging Information:	Standard web width 4", 15 inlays per linear foot, 150' minimum length, 3" internal core