

## FCC Experimental License Application Information

<b>Company Name:</b>	Tyco Safety Products / Sensormatic
<b>Address:</b>	6600 Congress Ave
<b>City, State, Zip:</b>	Boca Raton, FL 33487
<b>Name and Title, Contact Person:</b>	Mac Elliott
<b>Tel:</b>	(561)-912-6462
<b>Fax:</b>	561-912-6093
<b>Email:</b>	melliott@tycoint.com

<b>Company FRN: 0005-0526-26</b>
<b>(if not available, company TIN or EIN:</b>

**License type requested**

Special temporary authority (STA) - 6 months license term

Experimental license – 2 or 5 year license term renewable

**Description of Experiment or Research**

<b>Experiment Start and Stop Dates</b>	<b>Start: 6/05</b>	<b>Stop: 6/07</b>
--	--------------------	-------------------

<p><b>Purpose of experiment/Need for experimental license (detailed narrative)</b>          Sensormatic is developing an RFID reader system for sale exclusively outside the United States, primarily for the EU market. The product operates in the 865-868 MHz band allocated for this purpose in the EU. These frequencies are allocated for public safety communications in the United States. Sensormatic wishes to determine the read range and accuracy of their RFID system and will therefore need to activate the transmitter to power the RFID tags they plan to use with the system</p>
---

**Description of equipment and how it will be used (detailed):**

The RFID system consists of a RFID reader and various passive tags that respond to short range interrogation. The system operates dynamically between 865 and 868 MHz. We are requesting three of the 10 channels in the frequency table listed below for performance testing. We need three channels to test frequency agile characteristics specified in European Norm EN 302 208. Two of the three channels need to be adjacent to each other to assess certain performance and regulatory criteria.

Frequency Table

865500, 865700, 865900, 866100, 866300, 866500, 866700, 866900, 867100, 867300

If two adjacent channels cannot be realized then three channels anywhere in the band would be beneficial for the frequency agile testing.

If three channels cannot be utilized, then we are requesting the use of a single channel in this table for testing range and throughput of the RFID system.

**Transmitter Equipment and Station Details**

<b>Equipment Manufacturer:</b>	<b>Sensormatic Electronics Corporation</b>
<b>Trade or Brand Name:</b>	<b>Agile 2 Reader</b>
<b>Power Output range:</b>	<b>100 mW to 1W</b>
<b>Model Number:</b>	<b>IDRDR2866</b>
<b>Modulation type:</b>	<b>A1D [200KHz]</b>

<b>Number of Fixed Units:</b>	<b>10 optimal / 4 minimal</b>
<b>Location of Fixed Antennas (Lat., Lon, and Street Address)</b>	<b>Station 1.</b> Inside warehouse at 6600 Congress Ave.  N 26 degrees 24.287 minutes / W 080 degrees 05.951 minutes  <b>Station 2.</b>

<b>Number of Mobile Units</b>	
<b>Radius of Mobile Unit location from Fixed station(s) (specify km)</b>	<b>Mobile 1.</b> <b>Mobile 2.</b>

Coordinate datum:     NAD 27 or    NAD 83

## TX Frequency Range and Tolerance

Station/Mobile Number	LOW MHz	HIGH MHz	% TOL
S1	865	868	20 ppm
M1			

## Transmitter Parameters

Station/Mobile Number	Modulation Type	Emission Designator	Occupied Bandwidth	Power out, dBm
S1	Amplitude	200KA1DAF	200kHz	1W
M1				

## Antenna Details

Station/Mobile Number	Antenna Model/Type	Gain dBi	Beam Width (H)	Beam Width (V)	HAAT (meters)	AMSL (meters)
S1	IDANT10CEU25/ CIRCULAR POLARIZED PATCH ANTENNA	7	57	62	N/A*	N/A*
M1						

\*Per Form 442 which states:

<p>5. † Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? If "YES", give the following:</p> <p>(a) Overall height above ground to tip of antenna is <input type="text"/> meters.</p> <p>(b) Elevation of ground at antenna site above mean sea level is <input type="text"/> meters.</p>	<input type="radio"/> Yes <input type="radio"/> No
--	--

Our antennas will not extend more than 6 meters above the ground for this application, so HAAT and AMSL are not applicable.