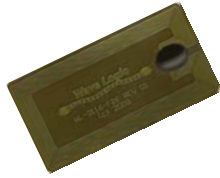


# Wave Logic



**PATENT PENDING**



**STERILE ID™ RFID Tag**  
**Passive HF 13.56MHz ISO 15693**  
**2k-Bytes Memory**



Wave Logic introduces our latest RFID solution for Bio-Med tracking with the release of the *Sterile ID™* transponder tag.

Designed to survive gamma sterilization, autoclave sterilization, E-beam sterilization and EtO sterilization processes for bio-medical and pharmaceutical applications.

- ISO 15693 Compliant
- 13.56MHz ISM band HF Transceiver front end
- 2k-Byte FRAM Memory
- 10B Write Cycle Endurance
- Unlimited Read Cycles
- RoHS Compliant
- Completely Passive (no batteries)
- Flexible Construction
- 3M 9471LE Adhesive Backing
- Wide Temperature Range
- Sterilization Stable for
  - Gamma
  - Autoclave
  - E-beam
  - EtO



**STERILE ID™**

ISO 15693 Sterilize-able 2k-Byte RFID Tag

**Target Process Applications:**

- Surgical Supplies
- Laboratory Devices
- Medical Devices
- Pharmaceutical Components

WAVE LOGIC INC, 175 EL PUEBLO RD, UNIT 28, SCOTTS VALLEY, CA 95066 USA

PHONE: 831 515 5699 [www.wave-logic.com](http://www.wave-logic.com)

REVISION 13022

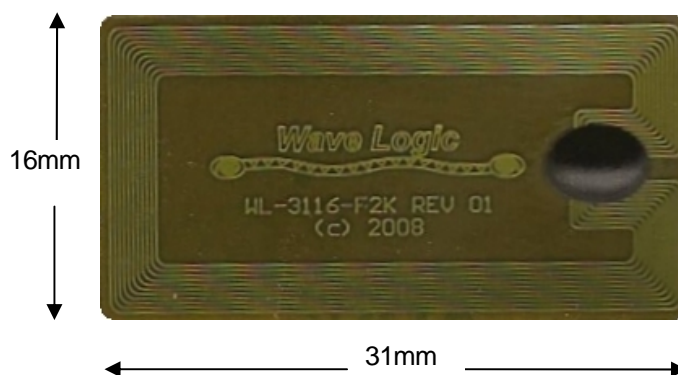
# Wave Logic



## Specifications

<p><b>Transponder RF Protocol:</b></p> <ul style="list-style-type: none"><li>• ISO 15693</li></ul> <p><b>RF Data Rates:</b></p> <ul style="list-style-type: none"><li>• 26.48kbs</li></ul> <p><b>Memory:</b></p> <ul style="list-style-type: none"><li>• 8-Byte UID (unique ID)</li><li>• 2k-Bytes FRAM Memory</li><li>• 10B Write Cycles</li><li>• Unlimited Read Cycles</li><li>• 10-year+ Data Retention</li></ul>	<p><b>RF Read/Write Distance:</b></p> <ul style="list-style-type: none"><li>• 30mm with TW18 Reader</li><li>• 50mm with TW30 Reader</li><li>• 75mm with TW40 Reader</li><li>• 100mm with TW100 Reader</li></ul> <p><b>Temperature:</b></p> <ul style="list-style-type: none"><li>• Operating: -40C to +85C</li><li>• Storage: -40C to +130C</li></ul> <p><b>Compliance:</b></p> <ul style="list-style-type: none"><li>• RoHS</li><li>• ISO 15693</li></ul>	<p><b>Sterilization Process Ratings:</b></p> <ul style="list-style-type: none"><li>• Gamma = 50kGy</li><li>• Vacuum Autoclave = 10 cycles *</li><li>• Gravity Autoclave = 100 cycles *</li><li>• E-beam = 10 Cycles</li><li>• EtO = 1,000 cycles</li></ul> <p><b>Construction:</b></p> <ul style="list-style-type: none"><li>• Polyimide Substrate</li><li>• Copper Etched Coil</li><li>• Epoxy Encapsulant</li><li>• Dimensions: 31mm x 16mm x 0.20mm (1mm @ IC location)</li></ul> <p><b>Delivery Form:</b></p> <ul style="list-style-type: none"><li>• Individually</li><li>• 5x3 (15) sheet arrays</li></ul> <p>(*) 130C Max. Temp</p>
---	--	--

## STERILE ID™ Dimensions



Overall Thickness is less than 0.20mm  
Maximum Height at IC location is 1mm