

# Intellex STT-7000 General Purpose RFID Tag

*Extended range, reliability, memory, and security for multipurpose asset tracking applications.*



The Intellex STT-7000 general purpose tags provide industry-leading range and read/write reliability

The Intellex STT-7000 general purpose tags are rugged, compact tags designed for a wide variety of applications indoors and outdoors. The tags provide exceptionally high read/write accuracy and long range operation, ensuring accurate reads and writes on fully-loaded pallets and containers at up to 50 meters. In addition, the STT-7000 tag's proprietary wake-up circuit ensures long battery life with persistent data storage. The tag's innovative security features provide secure on-tag data access. Intellex tags are the first to integrate all of these features onto a single chip.

The STT-7000 offers outstanding performance in a thin profile when mounted on plastic, cardboard and other non-metal surfaces. The tags can be mounted with adhesives, screws or plastic cable ties on reusable containers, pallets and parts bins.

## FEATURES

### Robust RF Communications

- Low turn-on threshold
- High receive signal sensitivity/backscatter efficiency

### Efficient Power Management

- Multi-stage wake up

### 60 Kb User-rewritable Memory

### Activation of Selected Group of Tags

### Built-in Application-specific Security

### Single Chip RFID Tag

## BENEFITS

- Up to 50 meter (150+ ft) read/write range
- Exceptional read/write reliability in real world environments

- Long battery life (up to 5 years), based on duty cycle

- Stores user information locally on tags:
  - E-manifest, maintenance records, custody chain, history, etc.

- Enables faster identification and sorting of tagged items

- Lockable read/write user memory protects data integrity
- 1 Kb block level locking with separate read/write permalock password protection

- Rugged, compact form factor tags

## SPECIFICATIONS<sup>1</sup>

<b>Device Type</b>	Class 3 RFID (battery-assisted passive) single chip transponder
<b>Protocol</b>	Class 3
<b>Operating Frequency</b>	902-928 MHz (North America); 865-868 MHz (Europe/India)
<b>Modulation</b>	Amplitude modulated forward link (reader to tag) Frequency modulated reverse link (tag to reader)
<b>Range<sup>2</sup></b>	Up to 50 meters (150+ ft)
<b>Battery Life</b>	Up to 5 years depending on use; data is persistent and also readable at close range upon battery expiration
<b>Data Rates</b>	8 Kb/sec forward link 8 or 32 Kb/sec reverse link
<b>Data Retention</b>	10 years at 85°C
<b>Memory</b>	64 Kb total, 60 Kb rewritable non-volatile user memory
<b>Environmental</b>	
Enclosure Protection	IP67
Temperature (Operating and Storage)	-4° to +140°F (-20° to +60°C)
Shock	IEC 60068-2-32, test Ed
Vibration	IEC 60068-2-6, test Fc
<b>General Dimensions</b>	2.95" x 2.95" x 0.33" (75 mm x 75 mm x 8,5 mm) (L x W x D)
<b>Mounting Options</b>	Screws, straps, adhesive; not included
<b>Other Features</b>	Password-controlled read, write, 1 Kb block level locking, and permalock

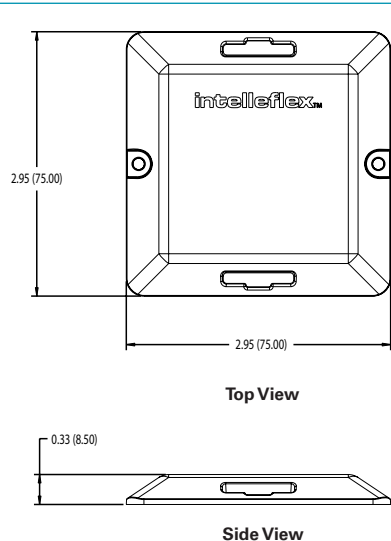
1. Intellex reserves the right to change product information and specifications without notice.

2. For best tag performance, Intellex recommends using circular polarized antennas with the reader (part number IA410.1).

## ORDERING INFORMATION

Part Number	Description
STT-7000	Standard asset tag; non-metal mounting; North America 902-928 MHz frequency range
STT-7000-EU	Standard asset tag; non-metal mounting; Europe and India 865-868 MHz frequency range

## DIMENSIONS



### Screw Type Options

#### Machine Screw

Socket Head, Button Head or Pan Head Screws Recommended  
Holes Designed for 4-40 or M3 Screw Threads  
Recommended Minimum Screw Length:  
5/16" (8,00 mm)

#### Wood Screw

Standard #4 Wood Screw Recommended  
Round Head Recommended  
Recommended Minimum Screw Length:  
5/16" (8,00 mm)

Note: All dimensions are in inches (mm)