

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

SPECIFICATIONS¹

Device Type	Class 3 RFID (battery-assisted passive) single chip transponder								
Protocol	Class 3								
Operating Frequency	902-928 MHz (North America); 865-868 MHz (Europe/India)								
Modulation	Amplitude modulated forward link (reader to tag) Frequency modulated reverse link (tag to reader)								
Range²	Up to 50 meters (150+ ft)								
Battery Life	Up to 5 years depending on use; data is persistent and also readable at close range upon battery expiration								
Data Rates	8 Kb/sec forward link 8 or 32 Kb/sec reverse link								
Data Retention	10 years at 85°C								
Memory	64 Kb total, 60 Kb rewritable non-volatile user memory								
Environmental	<table border="0"> <tr> <td>Enclosure Protection</td> <td>IP67</td> </tr> <tr> <td>Temperature (Operating and Storage)</td> <td>-4° to +140°F (-20° to +60°C)</td> </tr> <tr> <td>Shock</td> <td>IEC 60068-2-32, test Ed</td> </tr> <tr> <td>Vibration</td> <td>IEC 60068-2-6, test Fc</td> </tr> </table>	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
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General Dimensions	2.95" x 2.95" x 0.33" (75 mm x 75 mm x 8,5 mm) (L x W x D)								
Mounting Options	Screws, straps, adhesive; not included								
Other Features	Password-controlled read, write, 1 Kb block level locking, and permalock								

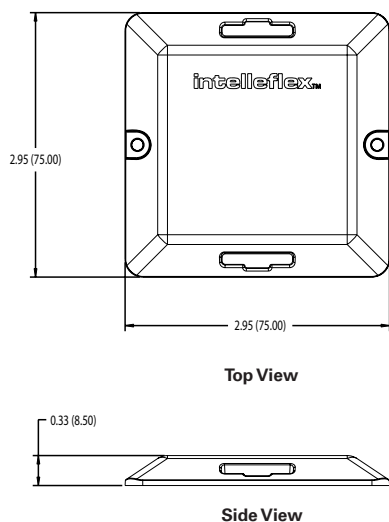
1. Intellex reserves the right to change product information and specifications without notice.

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)