Datasheet

E-Tag

The Sonitor® IPS E-Tag is a small battery powered wireless device to be affixed to movable objects for tracking purposes as part of Sonitor's Indoor Positioning System (IPS).

Functionality

When moving and/or at preset intervals the Tag transmits its own identification code using ultrasound. A Sonitor Receiver (microphone) hears and transfers the Tag ID-code to a Server which stores the Tag's location and time-stamp information in its database.

Architecture

The Tag circuitry is activated by its built in motion sensor, a timer, or by one of the optional signal buttons or tamper sensor switches. Otherwise, the circuitry is in a battery saving "sleep mode". Before entering a sleep mode, the Tag will transmit a few special signals indicating that the Tag no longer is in motion.

Tag versions

There are two standard versions of the Sonitor IPS E-Tag.

E-Tag

Equipment Tag with two push-buttons which can be individually configured to send messages applicable to the object the Tag is attached to, e.g. *Needs repair, Needs cleaning, Needs transport, Help*. Standard attachment methods are lanyard, tether, double sided tape, and bracket with screws.

E-Tag with tether

Identical to E-TAg with additional tether that includes a tampering sensor designed to provide an alert when tether is cut or opened. The tether also makes it easy to attach the Tag to small and/or odd shaped equipment. Attachment methods also include lanyard, double sided tape and bracket with screws.

	E-Tag	E-Tag w/tether
User Interface:		
Push buttons	●	●
Status LED	●	●
Security:		
Removal tampering sensor		
Tether tampering sensor		●
Attachment methods:		
Lanyard	●	●
Tether	●	●
Double sided tape	●	●
Bracket with screws	●	●

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Battery life expectancy

Battery life expectancy is dependent on motion and transmission intervals. The Tag-E battery will last for approximately 600.000 transmissions for typical hospital settings. The battery power status is transmitted as part of each signal and enables low battery warnings.

Cleaning and Disinfecting

The Tag is designed to be cleaned and disinfected by procedures used for other electronic patient care equipment using normal hospital cleaning detergents and disinfectant solvents. The Tag can be sprayed or rinsed off followed by a wipe-down.

Attachment

All versions of Tag-E can be attached to equipment surfaces with double sided tape or a bracket with screws. Other bracket attachment solutions such as for wristband, belt and for tubular surfaces are also available.

Specifications for the Sonitor IPS E-Tag (E-001 and E-003)			
Order numbers			
E-Tag	TAG-E001		
E-Tag with tether	TAG-E003		
Dimensions			
L x W x H	2.27 x 1.30 x 0.77 in.	57,7 x 32,9 x 19,5 mm	
Weight			
Total weight	0.99 oz.	28 gr.	
Ultrasound communication			
Frequency range	from 35 to 45 kHz		
Sound pressure	up to 115 dB SPL (ref.20 uPa, programmable)		
Directivity	80 degrees		
Nominal range	up to 45 feet	5 meters	programmable
Max range	90 feet	30 meters	
Transmission (beacon) rates	Typically 3, 5, 10, 20 or 30 seconds when moving, depending on need for update frequency and desired battery life. The Tag transmits a daily signal even when not in motion.		
Programming and modification	Transmission intervals. Button functionality.		
Tag Identification	Tags are equipped with barcode lables with the Tag ID in barcode format CODE-39 and Tag type no. and Tag ID in readable text.		
Power			
Battery type	Primary cell		
Technology	Lithium manganese dioxide, size CR2		
Example of type	GP Batteries, GPCR2		
Nominal voltage and capacity	3.0 VDC, 850 mAh @ 20 mA		
Battery lifetime	Up to 5 years depending on function and use.		
Disposal	Dispose of used batteries according to manufacturer instructions and local regulations.		
Environmental			
Operating temperature	+14 to +104˚F	-10 to +40˚C	
Storage temperature	-4 to +140˚F	-20 to +60˚C	
Attachment methods	Lanyard, tether, double sided tape or bracket with screws depending on Tag type.		
Shell			
Material	Terluran®, GP-35		
Color	Light grey (Pantone 427C)		

All specifications are subject to change without notice. Please check www.sonitor.com for updates.

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Tested To Comply with FCC Standards FOR HOME OR OFFICE USE