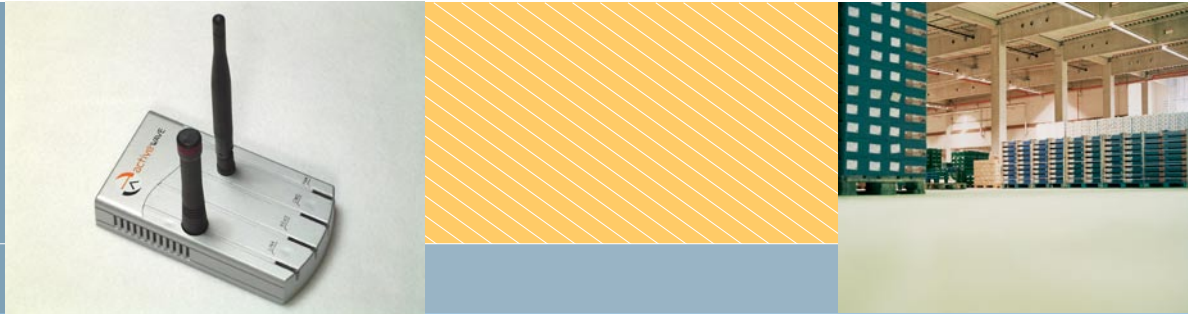


Smart Field Generator



Description

The ActiveWave Smart Field Generator is a small, efficient tag wake up device that communicates directly with the Reader.

The Smart Field Generator transmits wake up commands to tags at 433 MHz. For broadcast commands, any tag within range of the Smart Field Generator will respond by transmitting its ID along with other information. For non-broadcast commands, only the specified tag(s) will respond.

Because the Smart Field Generator supports 916 (927,868) MHz communications, it can communicate directly to the Reader. This presents several advantages over our Standard Field Generator.

When the Smart Field Generator is first powered, it automatically sends a power-up message. This message is sent to the Reader, then relayed to the Host. The Host immediately displays the Smart Field Generator's address and allows the user to change it.

Following are the Smart Field Generator settings that are configurable by the user:

- ID - Address of the Smart Field Generator.
- Assigned Reader ID - Address of associated Reader.
- Operating Modes - Continuous on/off period, motion triggered, or immediate Tag Call via Host.
- Tag Call - Specify tag ID, tag type, or all tags (broadcast).
- Field Strength - Adjust RF coverage area wirelessly.

The Smart Field Generator has three modes of operation. The Field Generator periodically turns on and calls tags for a specified time, then turns off for a specified time; the Field Generator is turned on by a motion sensor as soon as movement is detected; or the user can call a specific tag ID, tag type, or all tags at any time. This last feature is very powerful because it allows the system to search for specific tags at any location at any time.

The transmit field strength is adjustable wirelessly to control the size of the coverage area.

Current Practice

Traditional method of Access Control, Asset Tracking, and Inventory Control are limited and outdated. Access Control methods range from security guards to employee badges that must be swiped or placed close to a passive RFID proximity reader. Tracking methods are either entirely visual - dependent on security guards or surveillance cameras - or too costly such as GPS. Inventory Control methods require much money for complex enterprise software, and much more time and manpower for physical counting. Barcode scanning requires line-of-sight, close distance, and clean, undamaged barcode labels. None of these traditional methods offers a solution that is completely hands-free, automated, reliable, and that can save your business thousands.

The ActiveWave Solution

ActiveWave's active RFID solution offers numerous advantages over traditional methods.

Valuable items are easily tracked throughout a facility by simply attaching an ActiveWave tag. Alarms are automatically generated for unauthorized movements through specified doors and at specified times. This same concept applies to tracking people as well. In fact, ActiveWave's Host software ties together both people and assets such that certain assets can only be moved by authorized people.

For inventory counts, ActiveWave tags can automatically wake up and report their presence on a periodic basis. If a tag misses its scheduled "check in" time, then the Host can generate an alarm so the loss can be investigated immediately. New items are added to the count by simply moving them into the warehouse. Imagine the savings of automated, hands-free, daily updates to your entire inventory.

How else can ActiveWave help your business?

With our technology, features, flexibility, and innovation, the sky's the limit...

Visit our web site at www.activewaveinc.com.

Functionality	Wakes up tags	
Multi-Tag Read Capability	Yes	
Transmit Frequency to Tag	433 MHz	
Communications Frequency with Reader	916 MHz, 927 MHz, or 868 MHz	
Range	30m (100 feet) to tag	
	30m (100 feet) to/from Reader	
Host Communications	RF link through Reader	
Power	12Vdc, 1.5A	
Dimensions	without antennas	122 mm x 69 mm x 27 mm (4.8 in x 2.7 in x 1.1 in)
	with antennas	122 mm x 69 mm x 167 mm (4.8 in x 2.7 in x 6.6 in)
Weight	122 grams (4.3 oz)	
Case Material	ABS (Acrylonitrile Butadiene Styrene)	
Temperature	Operating	-35C to +50C (-31F to +122F)
	Storage	-40C to +85C (-40F to +185F)
Indicators	Red LED	On while transmitting/receiving packet to/from Reader.
	Green LED	On while transmitting packet to tag.
Connectors	Power	12Vdc, 1.5A
	Input	Optional motion detector (RJ-11 female)



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NOTE: The information in this datasheet is subject to change without notice.
 Visit our web site at www.activewaveinc.com for more information on ActiveWave products.