

PC-Card Reader



Description

The ActiveWave PC-Card Reader connects directly to a Host computer's PCMCIA port to monitor and control the RF side of the system. The Host can be a PDA, laptop, or even Tablet PC.

The PC-Card Reader is essentially a miniturized version of the ActiveWave Standard Reader with a PCMCIA connector. Besides the physical size and Host interface, the only other functional difference between the two Readers is that the PC-Card Reader does not have any input contacts or output relays.

The PC-Card Reader receives all RFID data transmitted by a tag. It deciphers this data and sends the information in real-time to the Host. Depending on the application, the Host can use this information to control access to restricted areas, quickly find assets in a facility, or update inventory counts in a warehouse. When searching for specific items, the PC-Card Reader can turn on optional tag LEDs and buzzers to make finding items much easier.

Along with the rest of our products, the PC-Card Reader was designed for easy setup, configuration, and use. When the Reader is connected, it will automatically be recognized by the Host. When the Host application sends a general reset command to the Reader, the Reader will respond with a power-up message to the Host. This message contains the Reader's address which can be changed by the user.

Optional colorful LEDs on the PC-Card conveniently indicate the Reader's operation at all times.

Two RF frequencies are used by the Reader to communicate to the system. The Reader transmits data using one frequency and receives data using a different frequency. This dual-frequency method allows for fast and reliable full-duplex communications.

For data integrity, all communication packets used by the Reader use parity bits and cyclic redundancy checks. These safeguards ensure that all data remains accurate.

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Traditional method of Access Control, Asset Tracking, and Inventory Control are limited and outdated.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	Reads and writes RFID tags	
Multi-Tag Read Capability	Yes	
Transmit Frequency to Tag	433 MHz	
Receive Frequency from Tag	916 MHz or 927 MHz or 868 MHz	
Range	internal antennas	8m (26 feet) to tag
		15m (50 feet) from tag
	external antennas (optional)	15m (50 feet) to tag
		30m (100 feet) from tag
Host Communications	PCMCIA Type-II	
Power	5Vdc via Host PCMCIA interface	
Dimensions	54 mm x 116 mm x 10 mm (2.14 in x 4.56 in x 0.39 in) - internal antenna model	
Weight	36.9 grams (1.3 oz)	
Case Material	ABS (Acrylonitrile Butadiene Styrene) and aluminum	
Temperature	Operating	-35C to +50C (-31F to +122F)
	Storage	-40C to +85C (-40F to +185F)
Indicators (optional model)	RF LED	On while receiving packet from tag.
	HOST LED	On while sending validated tag packet to Host.
	ACCESS LED	On while transmitting packet to tag.
	POWER LED	On when Reader is powered.
Connectors	PCMCIA Type-II, 5Vdc	
	External transmit and receive antennas (optional model)	



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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.