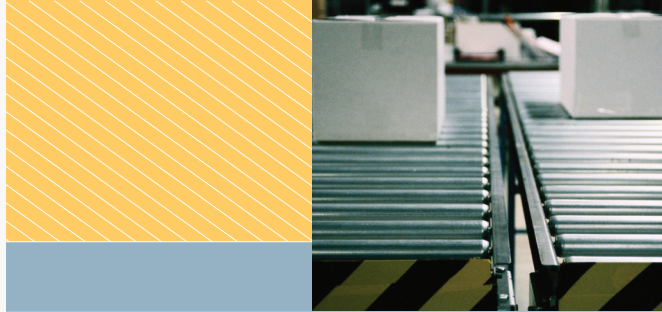


Handheld Reader



Description

The ActiveWave Handheld Reader is a small, lightweight Reader used to find tagged items quickly and conveniently.

The Handheld Reader fits comfortably in the palm of your hand. Users carry this portable Reader while looking for specific items such as merchandise, inventory, or other assets. For example, to find a specific crate in an aisle full of inventory, the user just enters the crate's tag ID in the Reader, then selects Call. The Reader will indicate that the tag is found. Optionally, the tag can either beep or blink an LED to help locate it. In addition, the RF range of the Handheld Reader is easily adjustable, so the size of the search area can be controlled. The signal strength of the tag's response (RSSI) is measured and displayed to the user, thus giving the user an idea of how far away the tag is located.

The Handheld Reader can also be used to manually scan and program individual tags. Instead of reading all tags in an area at one time, users can selectively read and program only particular items.

A barcode scanner is an optional part of the Handheld Reader. With it, users can quickly scan a barcode label, then write this same information to an adjacent RFID tag. This feature can save users tremendous time when transitioning from old barcode systems to new active RFID systems.

To download tag data to a Host computer, the Handheld Reader uses RS-232 or USB Host / Client ports for data communications.

Two RF frequencies are used by the Reader to communicate to the system. The Reader transmits tag data using one frequency, and receives tag data using another frequency. This dual-frequency scheme 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.

Traditional method of Access Control, Asset Tracking, and Inventory Control are limited and outdated.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.

Current Practice

CPU	Intel® PXA255 32-bit RISC 400Mhz
Operating System	Windows CE 5.0128MB RAM (SDRAM), 64MB RAM (Flash ROM)
Memory	FlashROM 64 MB; RAM 128 MB; SDRAM Expansion Integrated SD, CF Type II
Display	Graphic Transflective TFT with touch panel, 256K color with adjustable backlight Size: 3.5", 240 x 320 pixels
Keys	Entry options: 29 backlit keys
Host Communications	RS232: Baudrate 150 bps - 115.2 kbps, serial cable Ver. 1.1, full speed, serial cable connector,client, optional host WLAN, GPRS, Bluetooth
Battery	Lithium-Ion, 3.7 V 3000 mAh• High-capacity battery: Optional 3.7 V 4000 mAh
External Power	9.5V DC adapter to AC power source AC Power: AC100~240V, 50~60HZ
Dimensions	91.3/78 x 192.5 x 60.6/42.2 mm 3.59/3.07 x 7.58 x 2.39/1.66 in
Weight	Weight body: Ca. 600 g / 1 lb 5 oz (incl. battery)
Power Consumption	Over 10 hours
Operating Temperature	-10 to 50 °C / 14 to 122 °F
Operation Humidity	5 - 95 % (non-condensing)
Drop Test	1.5 m / 5 ft drop onto concrete surface
Rain & Dust Resistance	IP54
RFID Multi-Tag Read Capability	Yes
RFID Receive Frequency from Tag	916.5 MHz, 927 MHz, or 868 MHz - depending on Reader model
RFID Transmit Frequency to Tag	433 MHz
RFID Tag Signal Penetration	Tag signal can be read through virtually all non-metallic materials.
RFID Tag Read / Write Range - internal antennas	1.5m (~5 feet) / 3m (~10 feet)
RFID Tag Read / Write Range - external antennas	30m (~100 feet) / 15m (~50 feet). These ranges can be extended with larger antennas.
Operating Modes	RFID Reader, Barcode Scanner
EMC (Electro-Magnetic Compatibility)	RF communications is not affected by normal electromagnetic x-ray interference
Optional Accessories	Cradle, Vehicle Charger, Extra Battery, Gun Grip with Trigger, Waterproof Carry Bag



ActiveWave, Incorporated 902 Clint Moore Road, Suite 126 Boca Raton, FL 33487
Telephone: 561.999.9422 Fax: 561.999.9428

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.