

Description

The ActiveWave Universal Programming Station Reader is used to program ActiveWave active RFID tags.

This Reader can be used for any programming application where a user needs to change a tag's default identification number, change a tag's configuration information, or transfer customer-provided data to a tag's memory. Communications between the Reader and all tags is wireless (433/916.6MHz or 433/868.6MHz).

The Programming Station Reader is designed for easy setup and configuration. All communications from and to the Reader use cyclic redundancy checks to ensure all data remains accurate. Several different Reader models are available to support different tag frequencies (916.5 MHz or 868 MHz) and different Host communications (RS232 or Ethernet).

Tag Setup – Application Examples

Access Control

An RFID tag (badge) is assigned to each person who is authorized to access a facility or area. When the badge is first assigned to a person, specific information relating to that person is added to the access control system database. Such information includes the person's name, employee/vendor ID number, assigned badge ID, department number, restricted areas, and restricted access times. Depending on the application, most or all of this information can be programmed directly into the badge, where it would be available for use at other locations. For example, if an employee is granted access to a second location in a multi-location company, the employee data could be read directly from the



badge. This eliminates the need for manual data re-entry into the second location's access control system. The Universal Programming Station can be used to program as little or as much information into a tag as needed.

Inventory Control and Tracking

A tag is assigned to a container or pallet that holds merchandise in a warehouse or distribution facility. When the tag is first assigned, information relating to its associated container is added to the tracking or inventory control system database. The tag's periodic wake-up time for reporting its presence would also be assigned at this time.

As merchandise is added to or removed from a container, the tag could be updated to reflect the container's current contents. The tag could accompany the container as it moves to a new facility, where the container's contents could be read from the tag and added to the new facility's inventory tracking system without any manual data entry. Again, the Universal Programming Station can be used to program as little or as much tag information as needed.



Programming Station

Product Summary

Type:	ActiveWave Universal Programming Station
Applications:	Programming any ActiveWave Tag
Part Numbers:	See Reader Selection Guide

Specifications

Functionality	RFID Tag Programming Station
Memory	10 Megabits
Multi-Tag Read Capability	Yes
Operating Frequency from Tag	916.5 MHz or 868 MHz, depending on Reader model
Wake-up Frequency to Tag	433 MHz
Host Communications	RS232 or Ethernet
Typical Read/Write Range to Tag	30 centimeters (~12 inches)
Tag Signal Penetration	Tag signal can be read through virtually all non-metallic materials
EMC (Electro-Magnetic Compatibility)	RF transmissions are not affected by normal electromagnetic interference of x-rays
Power Source	12 volts DC power supply connects to 120/230 volts AC source
Operating Temperature	-35°C to +70°C (-31°F to 158°F)
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Dimensions	15.2cm wide x 17.6cm deep x 5.4 cm high (~6.0 in x 6.9 in x 2.1 in)
Weight	680 grams (~24 oz)
Case Material	ABS (Acrylonitrile Butadiene Styrene)

Indicators, Switches and Connectors

Front Panel: LEDs and Switches	RF LED	Rx from tag(s) / Tx or Rx from SFGGen
	Host LED	Good RF data received by Reader – sending to Host
	Access LED	Tx to tag(s)
	Power LED	12 volts DC power connected and Reader turned on
	On/Off	Power on/off switch
Rear Panel: Connectors	Pwr	12 volts DC input – non-polarized, 20 watts maximum
	Ethernet	Ethernet (RJ-45 female port) to Host
	RS232	RS232 (DB9 female port) to Host
	Input	Two contact sense inputs for external device status
	Out1 / Out2	Two isolated dry contact relay outputs for external device control

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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.