SAVR Communications Inc.

Connect & Communicate:

Product Description and Module Overview

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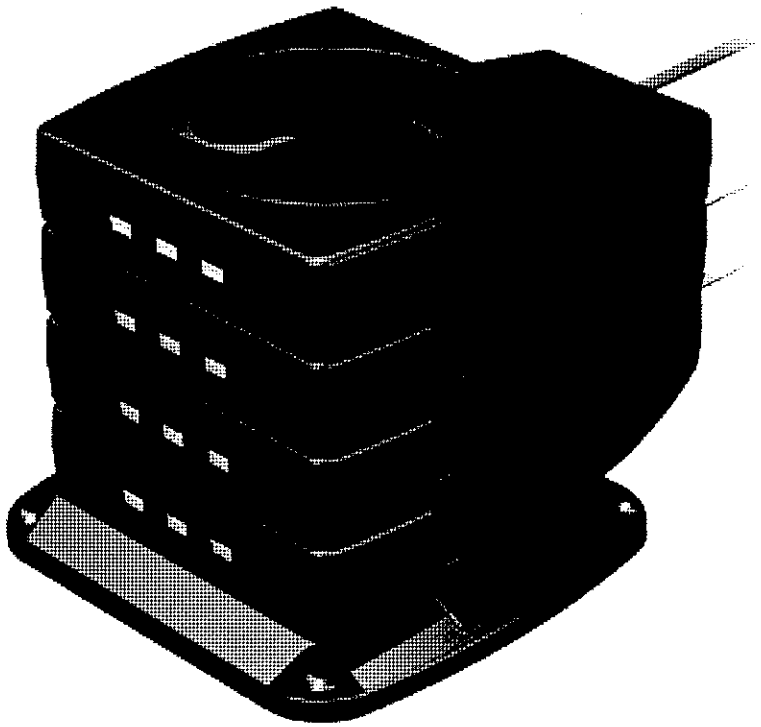
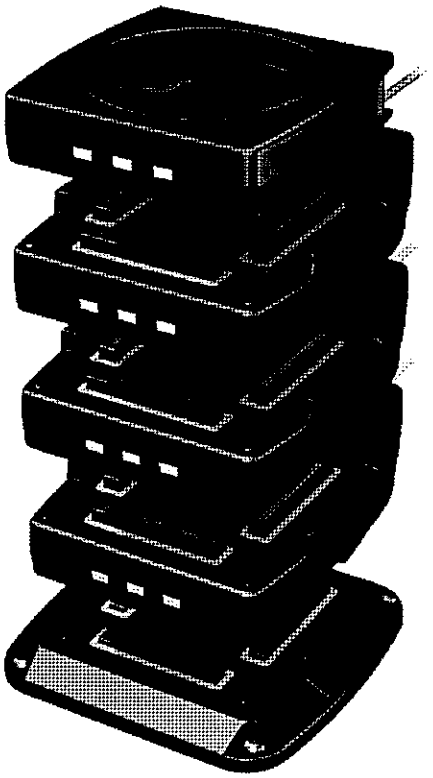


Product Description



Connect & Communicate™ is a completely modular RFID interrogator platform that can be configured for nearly any RFID application. You can choose from a variety of communication, industrial control and radio frequency modules to adapt the functionality of the interrogator to suit your specific needs.

Connect & Communicate™ uses a patent pending stackable architecture that allows modules to be added using an easy-to-operate latch and connector system. To add or remove a module, simply un-snap the safety latches and it's ready to change. Our specialized embedded software will automatically recognize and configure the new module for operation.

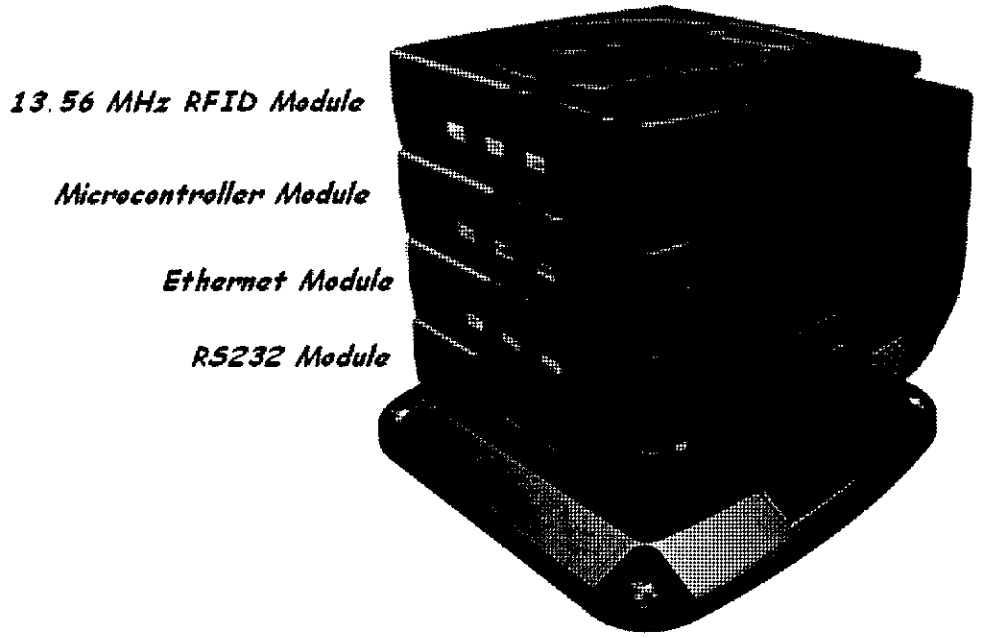
The Connect & Communicate™ product line is composed of various modules that can be assembled in a variety of ways to suit specific applications. The supported module types are grouped into four categories:

- RF Modules
- Micro-Controller Modules
- Communication Modules
- Industrial Modules

For basic RFID interrogator functionality three separate modules are required: an RF module, a micro-controller module and a communication module. When these three module types are joined, the RFID interrogator is created in its most basic form. For increased functionality and performance the user can add additional communication or industrial control modules.

Although the product can be configured in a variety of ways, the basic structure must remain the same: RF modules are always on top, micro-controller modules are always under the RF module, communication modules are always under the micro-controller module (up to 2 communication modules can be used in a single interrogator stack), and industrial modules are always under the communication modules (up to 4 industrial modules can be used in a single interrogator stack).

Module Description and Overview



RF Modules

RF Modules are always attached to the top of the unit and are used to generate the RF signal to energize and interrogate the RFID tags. Various frequencies are currently used in the RFID marketplace, a brief description of the RF module options are listed below:

13.56 MHz - The HF radio frequency module comes with an embedded antenna that provides a consistent 5 to 10 cm read range depending on environmental conditions and operates with a number of standard RFID tag protocols. The 13.56 MHz module is fully interchangeable with any product from the Connect & Communicate™ series.

860 – 950 MHz - The UHF radio frequency module is configurable to operate within all American, European and Asian RFID frequency bands. The module is available with 4 external antenna ports and fully supports our patent pending SMT interface. Read range is between 5 to 15 meters depending on environmental conditions.

Micro-Controller Modules

The micro-controller module is the core of the Connect & Communicate™ product line. The embedded processing power allows you to install user specific programs and functionality without needing a direct interface to any central processing or control system. The available USB port also allows you to use a flash memory stick for storage of data completely independent of an external system.

The micro-controller module automatically recognizes and configures any of the Connect & Communicate™ series modules that connect to the stack via our specialized firmware package. As new protocols and technology emerge, we can simply update the micro-controller firmware and you are automatically ready for any new functionality that may be needed in the future.

The micro-controller module is always attached underneath the RF module and above the communication module.

Communication Modules

Communication modules establish the primary data link between the host system and the Connect & Communicate™ interrogator unit. Communication modules are available in a number of different configurations to suit your application. They are also available with a master and slave selection switch so that two types of communication modules can be used in the same interrogator stack. Only the master communication module can receive commands from the control system. The optional slave communication module can only send data to a primary or secondary control system; it cannot accept commands from the control system. Communication modules are always connected underneath the micro-controller module and above the industrial modules. Communication modules are available with a number of different industry communication standards:

Ethernet – used to communicate with external system via standard Ethernet protocols using an RJ45 connector.

Wi-Fi - used to communicate with external system via 802.11 b/g protocols using a wireless connection.

RS232 - used to communicate with external system via RS232 protocols using standard RS232 shielded connector and cable.

Industrial Modules

Industrial modules are used to interface RFID information directly with industrial equipment and control systems. They can be used to communicate with industrial field bus networks or as a master control unit for industrial equipment. Most importantly, you can use several industrial modules in the same Connect & Communicate™ module stack to control and communicate with multiple devices or networks concurrently. Industrial modules are always connected underneath the communication modules. The Connect & Communicate™ line of RFID interrogators is available with a number of industrial modules:

EtherCAT – Industrial interface module that allows two-way communications with industrial equipment operating with the EtherCAT interface

DeviceNet - Industrial interface module that allows two-way communications with industrial equipment operating with the DeviceNet interface

Profibus - Industrial interface module that allows two-way communications with industrial equipment operating with the Profibus interface

PSDM (Power Source Disconnect Module) - Industrial interface module that allows external device power sources to be connected so that the Connect & Communicate™ module stack can function as a controlled circuit breaker