

## THE COMPANY

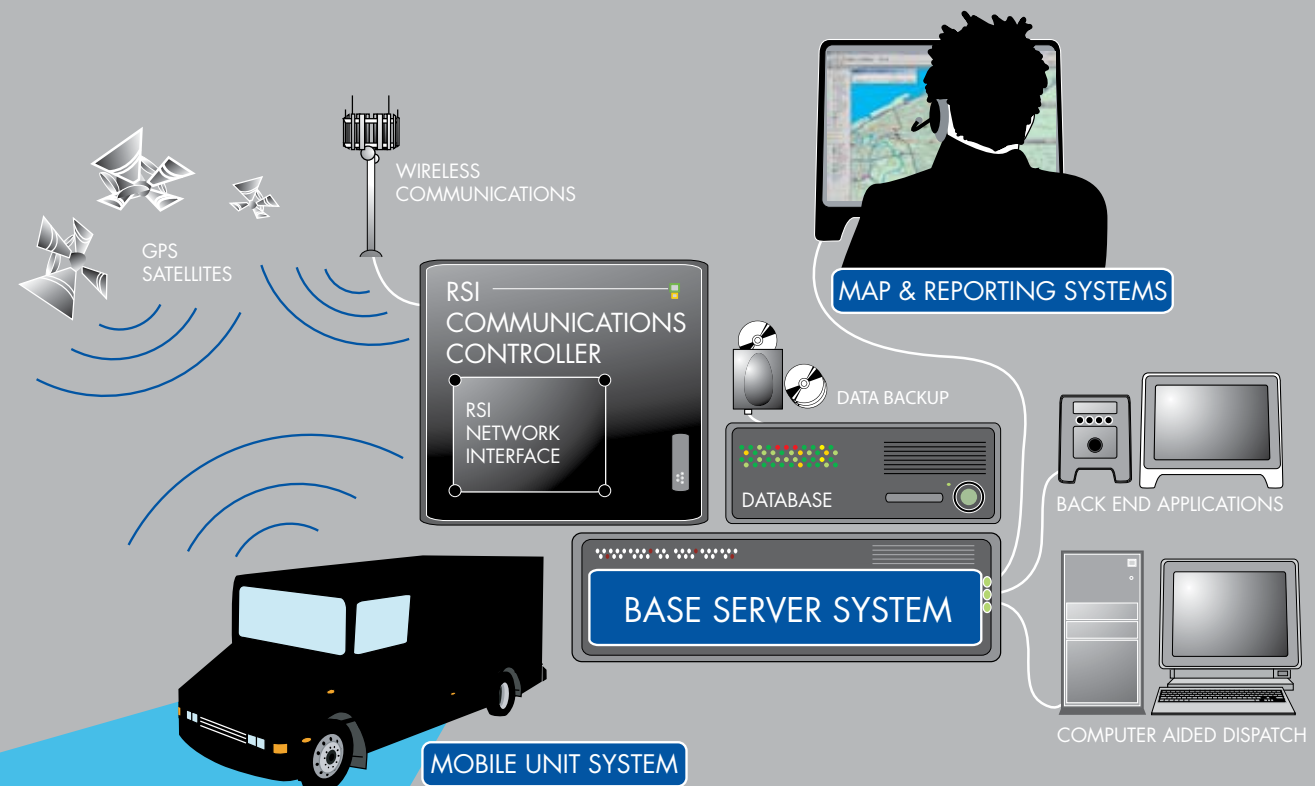
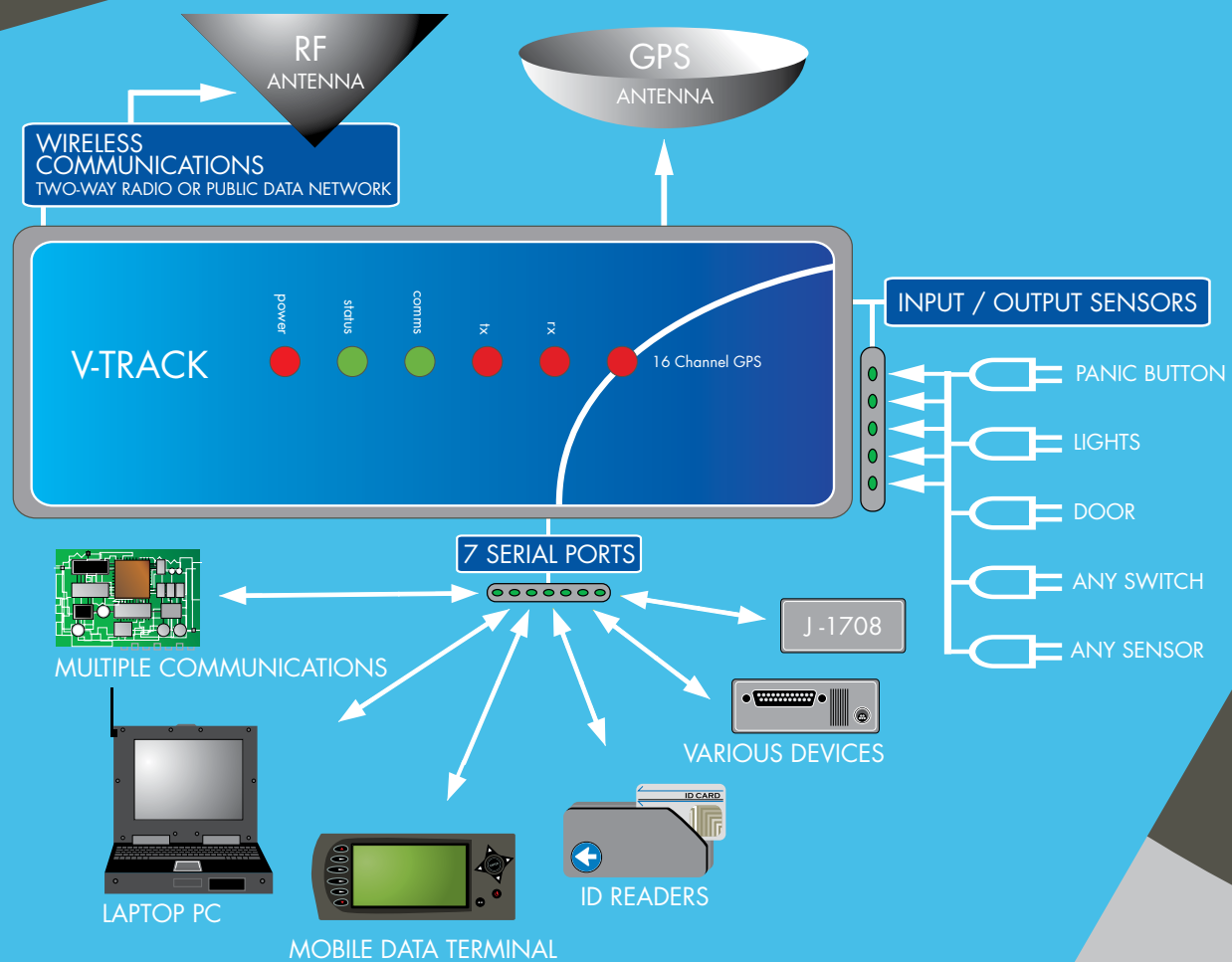
Radio Satellite Integrators, Inc. designs and manufactures vehicle tracking and mobile data systems. Founded in 1990, RSI is one of the oldest and most experienced companies in the industry. We have implemented well over 150 systems and thousands of mobile units throughout the world, with a client list that ranges from the largest corporations to small municipalities.

## VEHICLE TRACKING & MOBILE DATA SYSTEMS

Automatic Vehicle Location (AVL) Systems provide real-time vehicle tracking by integrating GPS, wireless communications, and GIS mapping software. RSI's AVL systems utilize wireless communications technologies to send GPS, mobile data and other vehicle status information to your dispatch where you can view your fleet's location on GIS-based AVL software. Our systems can be configured to range from very simple, to highly sophisticated, depending on your specific needs and desires.

## OUR APPROACH

Throughout RSI's experience we have developed a versatile core technology that is tailored for each customer at a cost effective price. RSI products are modularly designed to allow for limitless options and customization to both the in-vehicle equipment, and back-end integration at your dispatch. The result is a state-of-the-art vehicle tracking and mobile data system made to your organization's specifications. When experience and capability count, RSI is the clear choice!



## HOW AVL WORKS

By integrating our V-Track™ mobile unit with wireless communications and on-board sensors, the system enables you to monitor your fleet's activities in real-time. The RSI AVL system can utilize virtually any type of wireless communications including:

- Two-Way Radio: UHF/VHF, 800/900MHz, 220MHz, etc.
- Public Data Network: GPRS/EDGE, CDMA/1xRTT, Nextel, Cellular, etc.
- Multiple networks simultaneously including satellite

All vehicle data is collected and stored at your facilities in a relational database, where it is accessed by the GIS-based mapping software clients. This open-ended approach allows for various base configurations and complete integration to other back-end systems such as Computer Aided Dispatch or Work Order Management software. If desired, the RSI AVL system can be configured to use a Web browser over the Internet or your own Intranet.

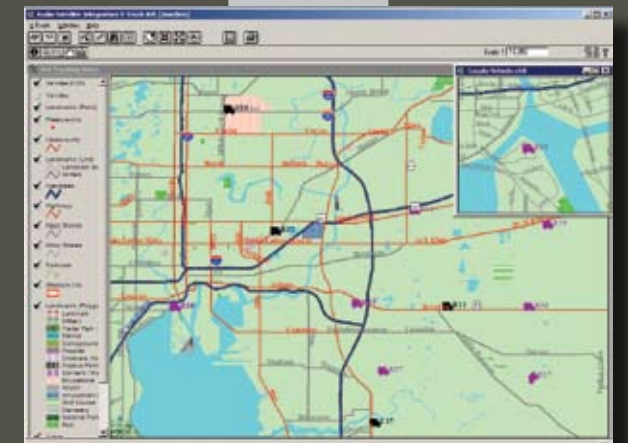
## IN YOUR VEHICLES

The in-vehicle V-Track™ unit contains GPS, wireless communications, and sensor technologies, with the option to interface to Mobile Data Terminals, or other devices such as laptop PC's (MDC's). The V-Track™ unit is responsible for reporting vehicle location and status information, in addition to acting as a transparent wireless gateway between your dispatch and any in-vehicle device. The mobile equipment can be interfaced to any variety of:

- Mobile Data Terminals or Laptop Computers
- Sensors: doors, lights, etc.
- ID/Card Readers
- Panic Buttons
- J-1708 Data Bus
- Virtually any device on the vehicle

## AT YOUR DISPATCH

At your base location we install server and database software that manages all the data communications and distribution within your AVL system. From here, we integrate the base server system with our GIS mapping software as well as any third party application such as Computer Aided Dispatch, Work Orders Management Systems, Fleet Maintenance, etc.



Our customized ESRI-based Mapping and Reporting software provides you the tools to view real-time and historical vehicle data in any imaginable way based on location, ID, group, status, sensors, address, etc. The layered mapping software allows you to pan, zoom, and search for all data including vehicles, addresses, and other elements in configurable map windows.



## SPECIFICATIONS

### Communications Options

- 2-Way Radio:
  - UHF/ VHF, 800MHz, 900MHz, 220MHz, conventional/trunked
- Public Data Networks:
  - GPRS/EDGE, CDMA/1xRTT, Nextel/iDen, GSM, analog cellular, satellite
- Hybrid Solutions:
  - V-Track™ can support up to 3 communications technologies simultaneously
- In-Vehicle Computing Options:
  - Mobile Data Terminals, Laptop PC, Tablet PC, PDA, Windows CE device, etc.
- In-Vehicle Device Options:
  - RF ID reader, card reader (Magnetic or SmartCard), printer, barcode reader, any serial device
- In-Vehicle Sensor Options:
  - Emergency Panic Button, lights, doors

### V-Track™ Physical Characteristics

- Size:
  - 6.5" L x 10.25" W x 2.4" H (16.5 cm x 26 cm x 6 cm)
- Weight:
  - 2.25 lbs. (1.02 kg)

### Environmental Characteristics

- Operating Temp:
  - 40 degrees C to +85 degrees C
  - 22 degrees F to +185 degrees F
- Storage Temp:
  - 60 degrees C to +85 degrees C
  - 76 degrees F to +185 degrees F

- Humidity:
  - 95% non-condensing at 65 degrees C
- Altitude:
  - less than 60,000 feet
- Vibration:
  - 1.7g 2/Hz @ 20 Hz
- Enclosure:
  - The standard all aluminum enclosure is dustproof and splash proof.

### Technical Specifications

- Power:
  - 9-32 VDC w/ PolySwitch fuse protection
- Normal Draw:
  - 210 mA @ 12 VDC
- Sleep Mode:
  - 8 mA @ 12 VDC
- Controller:
  - Intel 386 EX microprocessor
- GPS:
  - L1 Frequency, C/A Code, 16 Channel Continuous Tracking
  - All-in-view tracking and positions solution, WAAS capable
  - Position Update Rate:
    - Maximum – 4 per second
    - Minimum – infinitely programmable
- Time to First Fix:
  - <5 seconds (typical)
- Accuracy:
  - 2.5 meters CEP
- Maximum Velocity:
  - 950 mph
- Maximum Acceleration:
  - 2 g

Specifications subject to change.

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**Radio  
Satellite  
Integrators, Inc.**

Automatic Vehicle Location and Mobile Data Systems