

- 4G Cellular Router, GPS, Active 433Mhz RFid Reader, Passive UHF RFid Reader, Vehicle Interface
- A smart GPS Router for *your* smart Devices
- Works with Android, iPhones and Windows
- WiFi Access Point and Client simultaneously
- J1939, J1708 and OBDII Interface
- UHF RFid read range over 10 ft.
- Active RFid with over 100' Range
- Dynamic device provisioning and multi-carrier support by Vodafone/Verizon

The IntelliVan mobile RFID product includes a GPS, 4G Cellular Modem, WIFI Client/Server, Ethernet and Vehicle Interface integrated in a single compact rugged package. Ready for mobile installations worldwide, whether extreme hot or cold environments (-30 to 85C).

The integrated Active and Passive RFID modules reduces overall cost and simplifies installation. Choose from a wide variety of antennas to fit your application requirements.

Robust communications provide for least cost routing, regardless if you are on the road or in fleet facilities. The WIFI module supports 802.11 b/g/n with WEP, WPA and WPA2 security. The WIFI module can operate as both a client and server simultaneously. The advanced U-blox Neo 7 can provide road segment detail for routing and driver performance.

The Linux based operating system will ensure standard API's and online support for application developers. Interface programming made easy for users to manage connections via customizable web interface. For worldwide installations the Vodafone service guarantees support with worldwide SIMS-otherwise Verizon is our vendor of choice in the US.



Mobile



WiFi Devices



Stationary



RFID



4G



WiFi Access Point



LAN



Enclosure: The rugged IP67 glass filled polymer case is UV, Gas and Oil resistant. All connectors are metal, and the peripheral connectors are waterproof even when unmated. A compact 5.5" x 6.0" x 2.1" size provides flexibility for mounting into difficult locations.

Modem: A Gemalto ELS6 4G LTE modem optimized for Machine to Machine applications allows for speeds up to 10 MBaud. Multiple serial ports enable modem monitoring while the data channel is open.

GPS: U-Blox NEO-7 56 channel receiver supports GPS, GLONASS, QZSS and SBAS. It can acquire position with -148 dB signal, and can track down to -162 dB. Cold starts take as little as 29 seconds and reacquires in 1 second. Optional Timing, Precision Point Location and Dead Reckoning modules are available.

Passive UHF Rfid: The reader/writer transmit power is selectable from 10 dB up to 28 dB. It is compliant with all EPCglobal class 1 Gen2 (ISO 18000-6C) tags. The operating frequency is adjustable from 870 MHz to 960 MHz to provide world wide service. Three antennas are available ranging from +3 dB to +9 dB. One or two multiplexers can be connected to work with four or seven antennas. Depending on antenna configurations and tags, reads range from 4 to 25 feet.

Active 433MHz Reader: The reader is able to read active tags up to 150 feet depending on tag and antenna combinations. Several tags are available including Asset, Industrial and Personnel. These tags are designed to transmit every 10 seconds and while moving. At these transmit rates, the batteries will last five to eight years.

Vehicle Interface: Simultaneous monitoring of the J1939 and J1708 engine interface allow the IntelliVan to collect and request an incredible amount of data. Information regarding vehicle health and maintenance, as well as driver habits are readily available. The CAN bus can be used for OBDII in light vehicles or NEMA 2000 in boats as well.

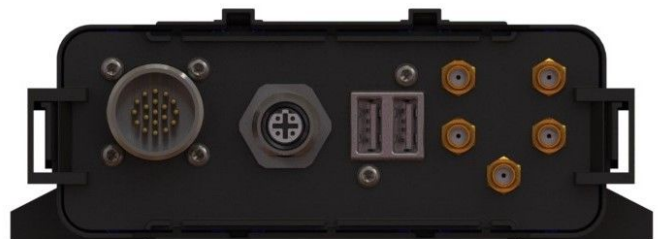
Chipset: An Atheros 400 MHz Mips 24K processor with 64 Mbytes of RAM and 16 Mbytes of Flash, provides the heart of the IntelliVan. With the Operating System and Router functions utilizing less than half of the available resources, there is ample room for third party applications.

Operating System: OpenWRT is a subset of Linux specifically designed for routers. It is open source and has an active workgroup and community. With the OS comes LUCI, a fully customizable user interface for accessing all router functions. A multitude of language packs are offered for localization.

Router: The IntelliVan allows complete flexibility for varying routing scenarios. The Ethernet port can be configured as an upstream or downstream port, the unit can serve or be served it's network configuration. It employs least cost routing to reduce cellular airtime bills, and can even be a WiFi client and access point simultaneously.

WiFi: The IntelliVan is a 2.4 GHz 802.11 b/g/n compliant device. Line of sight connections over 400' are possible with +7 dB omnidirectional antennas. Secure connections can be made through WPA2 and WEP.

Operating Specifications: Operating voltage is from 8 to 36V, but the unit is protect from -40 to +60 volts. Average current @12V is 300mA, 700mA with Passive Reader on, and a shut-down current of ~500uA. Operating temperatures are from -30 to 80 degrees Celsius.



Connections:

M23, 19 pin	Power, Ground, Ignition CAN Bus, J1708 RS232 Serial Port, Dallas 1-Wire, Digital I/O
Dual USB	Dual USB 2.0 High Speed Ports
M12, 4 Pin	10/100 BaseT Ethernet
5 x SMA	Cellular Modem , GPS, WiFi, 433 MHz Rfid, 900 MHz Rfid