

Enabling the RFID Desktop

Many of the business workflows that can benefit from RFID take place within environments where the use of typical RFID devices would prove themselves impractical. Traditional antennas are often bulky, lack any intelligence to provide direct feedback, and transmit much more energy than is appropriate for many applications. RFID printers are typically well suited for printing tags in large volumes, but offered at a price point that makes them less attractive in lower volume environments.

The TrueVUE™ IntelliPad™, one of Vue Technology's VUEPoints™, has been designed to fill the gap in specialized areas that require RFID capabilities with a small form factor, offering significant intelligence at an affordable price. Suitable for tag writing, inventory receiving, tag reading, product returns and other key workflows in areas including desktops, Point of Sale stations, counter tops, and tagging stations, the IntelliPad can improve the value derived from RFID by fitting RFID into your existing environment.

TrueVUE IntelliPad's *Driving Vision*:

Provide **read points** and **tag writing** in areas best suited to **impact business workflows**

To deliver on this vision, IntelliPad has been designed as an RFID network device providing value across the following key areas:

Powerful RF Antenna.

The UHF antenna on the IntelliPad is capable of accurately reading and writing RFID tags irrespective of their orientation to the pad. Configurable to output levels of up to 25 dBm, the IntelliPad packs plenty of power to read tags on even the most difficult of surface types including metals, liquids and more across a range of product categories from pharmaceuticals to media to apparel and more.

Intelligence on Board.

IntelliPad is a network addressable intelligent VUEPoint™ that gives it much more intelligence than a standard antenna device. With an ability to control peripheral devices, provide visual and audible cues, and determine the health of the antenna, the IntelliPad is a powerful network-based antenna system.

Networkable.

Extending its intelligent capabilities, the IntelliPad is a network device that can attach to TCP/IP based Ethernet networks. Combined with the on-board intelligence, this means that the IntelliPad can be deployed independently of a computer, networked into a system as a standalone device able to control barcode input, undertake read and write activities, and provide user feedback.

Convenient Form Factor.

The size and form factor of the IntelliPad have been designed with a focus around integrating RFID into existing activities and environments. Unlike far field industrial designed antennas, the IntelliPad's sleek look allows it to be used in customer-facing areas for very close reading requirements. With its compact design and option to mount under counters, the IntelliPad is ready to work where you work.



Features

Powerful Antenna

- Can read items from inches to feet away.
- Supports EPC Generation 1 and Generation 2.
- UHF and HF antennas available.
- Circular polarized antenna design is not sensitive to tag orientation (tags can be read and written regardless of their orientation with respect to the IntelliPad).
- Power output is configurable and supports up to 25 dBm.
- Can interface with a wide variety of RFID readers from best-of-breed manufacturers.
- Works across a broad range of product categories reading tags on liquids, metals and small form factors.

Integrated Intelligence

- Provides reader power management.
- Can manage a barcode scanner to read barcodes on products. TrueVUE software can then automatically trigger a write tag event upon successful scan.
- Provides self-diagnostics, including input 24 Volt current, reader power, reader current, device temperature, RF power, etc.
- Responds to SNMP control signals.
- Visual feedback to users through green, yellow and red lights.
- Audible cues allow for additional user feedback.
- Status lights provide feedback on the state of the antenna, the overall device, and readiness for use.
- General purpose I/O port that can be used to take input from various motion detectors such as laser beam based trip wire.

Network Capabilities

- Supports Ethernet directly with LAN ports.
- Attaches to TCP/IP based Ethernet networks.
- Switch Ethernet 100 Mbps bus offers multiple Ethernet connections, enabling the IntelliPad to network to a dedicated reader, the main RF network, and other devices.
- Supports auto setup using standard DHCP protocols and a specialized algorithm for address.
- Devices register themselves automatically by sending an SNMP cold boot notification to the TrueVUE software, allowing the software to identify and query the device, and placing it into an automatic network topology.
- Firmware implements SNMP (Simple Network Management Protocol).



Form Factor

Designed for desktop use with a small footprint (12.25 in. by 12.31 in.).

- A flat upper surface allows for the placement of items directly on top of the IntelliPad device or mounting of the pad beneath a counter top.
- Hardened plastic cover supports the placement of heavy items or multiple items on the device.
- Aesthetically designed for a pleasing look in customer-facing areas, such as the Point of Sale, open work areas, cabinet displays, etc.
- Primary cable connections are located at the rear of device to facilitate the concealing of cables.

Technical Specifications:

Physical Characteristics

| | |
|------------------|---|
| Dimensions: | 12.25 in. W x 12.31 in. D x 1.974 in. H |
| Weight: | 4.0 lbs. |
| Radome Material: | UL 94 V0 plastic |

Electrical Characteristics

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|-----------------------|------------------------------------|
| Nominal Impedance: | 50 Ohms |
| Frequency Range: | 865-956 MHz (U.S., Europe & Japan) |
| Polarization: | Circular polarization |
| Max. Input Power: | 1 watt |
| Max. Effective Power: | 25 dBm |
| Antenna Gain: | 8.5 dBi |

Connectors

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|--------------------|---------------------------------------|
| Ethernet: | Qty (3) 10/100 Mbps Ethernet ports |
| RF in connector: | Qty (2) 1.0/2.3 R/A PCB Jack |
| RS-232 input: | Qty (2) DB-9 connectors |
| Power input jack: | Qty (2) 2.1 mm ID, 5 mm OD, 9-24 VDCs |
| Power output jack: | Qty (2) 2.1 mm ID, 5 mm OD, 9-24 VDCs |

Certifications

- UL certified
- FCC certified
- CE and RoHS certification pending

System Requirements

Minimum hardware requirements: UHF reader with appropriate antenna connector cables/couplers.

Minimum software requirements: TrueVUE™ Site Manager,™ TrueVUE™ Essentials™, along with their underlying software and hardware requirements.