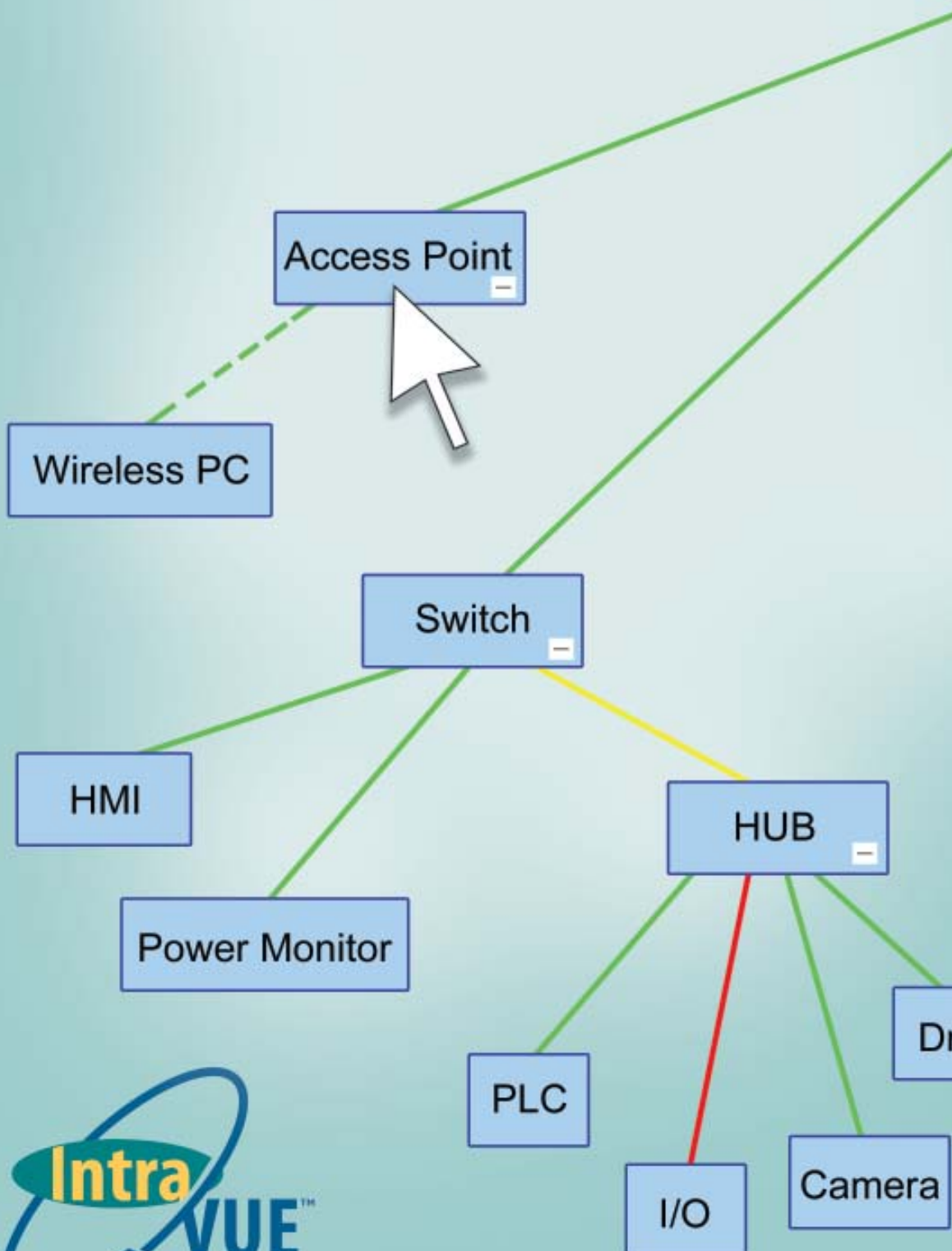


# Support of Your Ethernet Network is Just a Click Away

Visualize,  
Document &  
Keep Your  
Network  
Running!



Ethernet  
Network Tools  
to Simplify  
Network  
Support

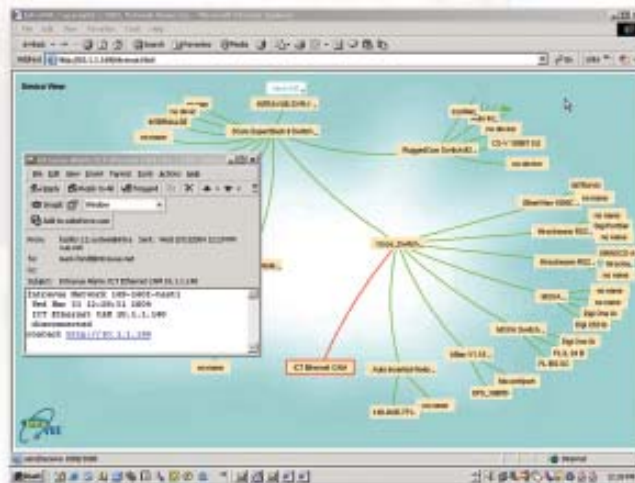
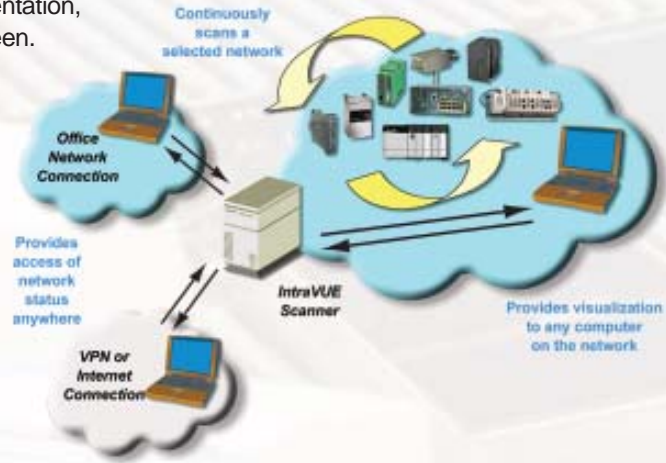
# Why IntraVUE?

## Do you have a tool to help you solve networking problems quickly?

**IntraVUE™** is a software package that provides true automatic network mapping and real-time monitoring function. Utilizing Ping, SNMP information and advanced algorithms, IntraVUE™ automatically draws an accurate connection diagram of the network. The software is installed on a computer that resides on the network and is running continuously. IntraVUE™ displays are viewed through a browser interface, thus allowing several people to view the real-time availability of the network on their own computer, or any computer accessing the webserver of the IntraVUE™ computer. Using a patented Hyperbolic representation, the entire network is displayed on a single screen.

## Can you support your network remotely from wherever you are located?

IntraVUE™ is often applied in a network that may be a distance from the individuals responsible for supporting it. It may be in different facilities, remote pumping stations, electrical substations, or plants that are in other countries. The use of a browser to access IntraVUE™ provides you with capabilities as if you were local to the network.



## When was the last time someone contacted you before you were aware of a problem with your network?

Let IntraVUE™ continuously monitor your network so you don't have to. IntraVUE™ will email or text page you if a problem occurs. The alarming capability allows you to have the ability to support a number of different networks that can be separated by thousands of miles.

## Can you include network status information in your HMI/SCADA system, without having to reprogram?

IntraVUE™ does not have to be a standalone application, but can be integrated into other software packages such as HMI, SCADA, Building Management, and other OEM applications. IntraVUE™ can link the software and allow interfacing to Alarming, Historian, or Report applications.

## What networking tool focuses on the edge devices as well as the network infrastructure?

Traditional tools focus on infrastructure (switches, routers) and primary servers, with little attention to the non-critical end nodes (PCs, printers). Now, where your end nodes (PLCs, I/O, Robots, etc.) are critical, IntraVUE™ provides a real-time status of the devices as well as the infrastructure. All documentation required to support the device is available as hypertext links.



**Crafted for you to support the specific devices connected to your network.**

**IntraVUE™** provides both financial and resource benefits that can pay for itself in the first few months.

No matter if you purchase a high priced IT package or download networking shareware off the Internet, if it is not easy to use then the package will cost you more in wasted time. IntraVUE™ has proven to provide a substantial return by providing four basic functions for all levels of support staff.

### Increase Security

The ability to identify new devices that join the network and issues that may have been created from such a connection is another key benefit. It is not possible to fully lock down any network with absolute certainty. IntraVUE™ will at least provide you with details as to the time, location, and even the address used, if a device is connected to the network. IntraVUE™ can also document any moves or deletions from the network. As wireless devices are used, IntraVUE™ can even show wireless devices as they move between access points or the last known connection before the signal was lost.

### Simplify Fault Recovery

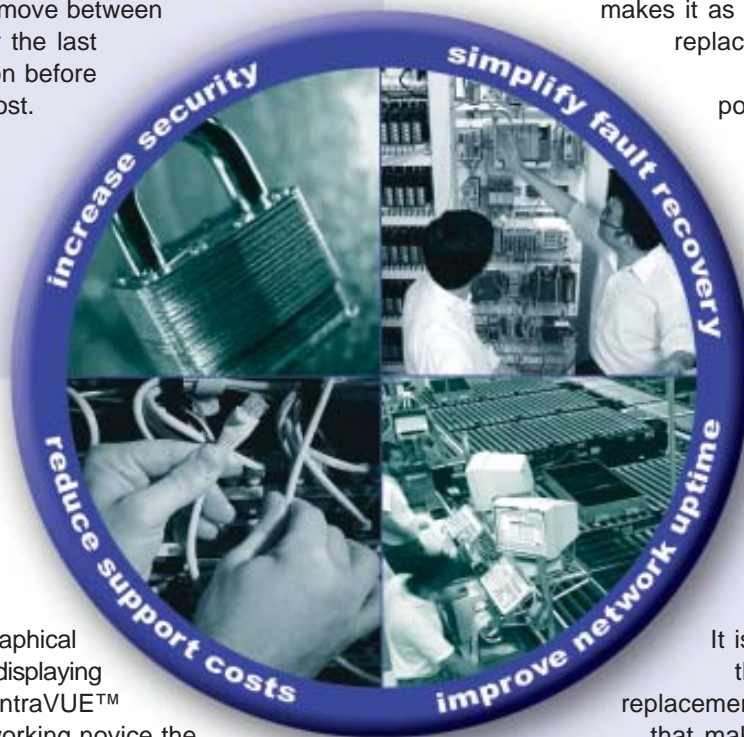
The ability to quickly and easily replace a device with a fixed IP address will save money and avoid long upsets in systems. Email messages will instantly notify that a device has failed. Information on the location, model number and versions can be accessed through the IntraVUE™ interface. The Auto-IP feature leverages information obtained from the network and devices to provide a system wide ability to automatically track and securely initialize replacements. The software makes it as easy as taking the replacement, connecting the cable and then powering up the unit.

### Reduce Support Costs

By providing a graphical view and visually displaying troubled areas, IntraVUE™ can allow a networking novice the ability to identify and locate problems. Many of the troubles on an Ethernet network are simple connection or device specific faults. The continuous live display of the network with changes in color to indicate trouble provides a unique overview that anyone can quickly see a fault occur. Most network packages are text-based with complex paging which complicate and confuse even skilled networking individuals. IntraVUE™ will allow your current resources the ability to handle most network problems. This reduces the need to tie up valuable IT resources on simple problems, or reduce your dependence on outside services.

### Improve Network Uptime

It is not only allowing the quick and easy replacement of failed devices that makes IntraVUE™ so powerful. By continuously scanning 24x7, IntraVUE™ helps in another area that plagues most networks, "Intermittent Failures". Most devices do not fail without prior warning. The problem is that most people cannot see this until its too late. Typically the failure is noticed at a time in which the device or connection is required. IntraVUE™ log files capture intermittent problems and allow them to be addressed before a real problem is created.



Now, software that can remove the difficulties of supporting Ethernet networks! Whether you're a major Automotive manufacturer, Food & Beverage producer, Pipeline company, Package handler, Airport or Port authority, IntraVUE™ has proven its value. From complex applications over WANs to small substation applications IntraVUE™ is a scaleable solution that provides the same easy to apply and use features not seen in other network management packages.

## Quick and easy graphical visualization of the problem area

The network is placed on a single page and the user is allowed to navigate around to the area of interest by dynamically moving the network in the display. This single page avoids the complexity of the user having to sort through pages of displays. Details of any device can be easily accessed providing quicker responses to problems. By hovering the pointer over an object, a display will pop-up with more details such as port connection or IP address(es).

## A Common Tool

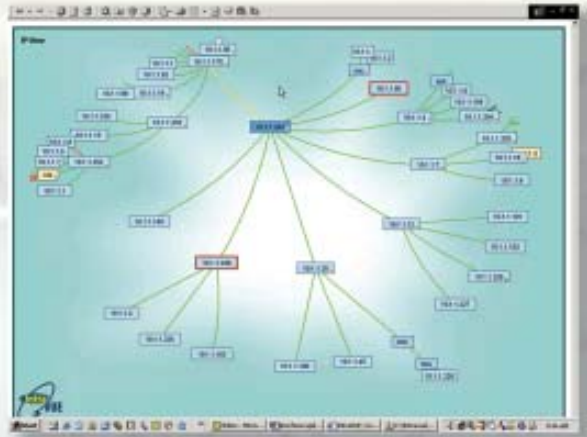
IntraVUE™ can provide valuable information to several departments. The local plant floor personnel can easily solve basic connection or reset issues based on close proximity to the affected equipment. Most IT staff may not be responsible for servicing PLCs, Power Meters, and Robots that are connected to the network and having problems, but may want to interface with the control group on other issues. IntraVUE™ makes for a good common tool for both. The real world depiction of current state also provides a good look at the relationship between devices and the infrastructure connecting them.

## Notification of a network failure or capturing of intermittent failures.

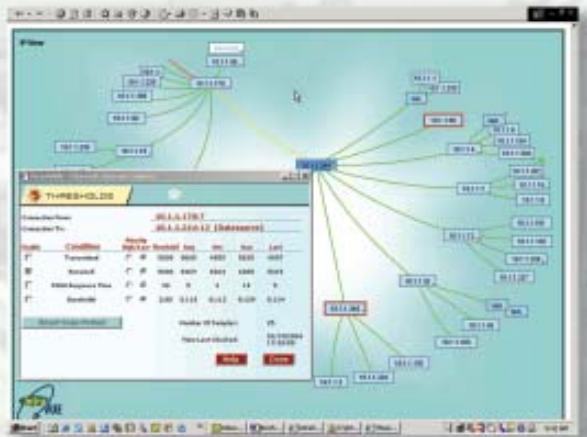
The continuous 24x7 monitoring of the connection status of all devices insures that if a problem occurs it can be immediately identified. Through the use of Email, paging or a status point sent to an operator interface, IntraVUE™ notifies the appropriate individual of a problem. Alarm messages for each device can be assigned to specific individuals as many problems may arise from a specific end device. Most network management packages focus solely on the switch and provide little support of a simple IP addressed end device.

## Access to all necessary documentation to solve the problem

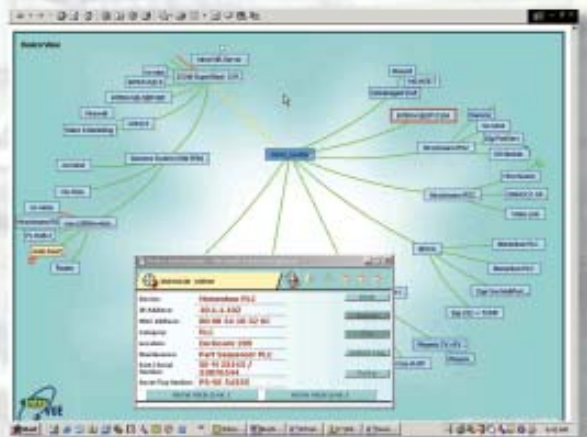
Once a device is identified as having a problem, additional information specific to the device may be required to fully service the unit. IntraVUE™ provides specific details such as the devices type, Name, IP address, and MAC address. In addition, IntraVUE™ can also provide links to specific documentation (Wiring diagrams, User Manuals, Operating Procedures and Configuration information). Using hypertext links associated to the device, information can be retrieved electronically. Each of the six views per device can have two specific weblinks enabling very customizable support capabilities. This ability is far more comprehensive than traditional networking packages and even exceeds most fieldbus capabilities. Pictures can be added to provide even more visual support of the failed device.



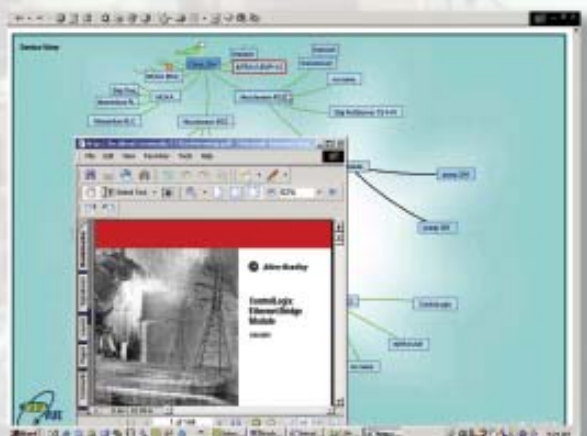
Hyperbolic representation of the network allows the ability to click on an area and move it around.



Right click on a line to obtain connection information.



Right click on any box and open a device view.



Right click on a device and you can link directly to real-time status, or documentation about the device.

## What if you can go back in time and see what really occurred!

Many OEMs and Supervisors too often are notified by the local personnel that something happened and things are not operating properly. When you try and identify the cause, there are little details. IntraVUE's Event Log

Date	Time	Description	Category
2007	10.1.1.1	17:17:08 [00:00:20:AB:AF:82, no name]	Case
2008	10.1.1.222	01/19/2004 Device 10.1.1.222 disconnected (00:00:20:AB:AF:82, no name)	Case
2008	10.1.1.222	01/19/2004 17:14:52 Admin worked on name / 10.1.1.222 / 00:00:20:AB:AF:82	Admin
2008	10.1.1.222	01/19/2004 17:04:38 Device has new IP 10.1.1.222, the old IP was 10.1.1.1	Case
2008	10.1.1.88	01/19/2004 17:00:49 SNMP Support task	Case
2008	10.1.1.1	01/19/2004 17:00:15 Device 10.1.1.1 disconnected (00:00:20:AB:AF:82, no name)	Case
2008	10.1.1.140	01/19/2004 17:00:23 Moved Device 10.1.1.140 to 10.1.1.244-7 (00:00:14:01:84:FE, ICT Ethernet CAM)	Case
2008	10.1.1.140	01/19/2004 16:59:34 Device 10.1.1.140 reconnected with SNMP-Support (00:00:14:01:84:FE, ICT Ethernet CAM)	Case
2009	10.1.1.244	01/19/2004 16:59:34 Trap Link Up From 10.1.1.244	Trap
2008	10.1.1.140	01/19/2004 16:59:32 Device 10.1.1.140 disconnected (00:00:14:01:84:FE, ICT Ethernet CAM)	Case

is a location in which you can see exactly what actually occurred. Intermittent hardware failures, devices added, connection moved, or address changes are all logged and time stamped. This time feature has allowed individuals to identify problems that were created by vibration, temperature, a faulty device, or someone accidentally changing or misconnecting a device.

## What if you can find devices that may have the same or several addresses installed!

Finding duplicate IP addresses or finding devices that have several IP addresses has always been a difficult problem. Trying to visualize where and how they are configured required a great

SEARCH

IP-Address:

MAC-Address:

Search

deal of time and patience. IntraVUE™ can relieve you of this frustrating task because it is capable of listing all IP addresses used in the network. This list occurs even if one device has the same IP address or with a device that has multiple IP addresses.

## Empower the Network!



Auto-IP is the easiest and most cost effective method to automatically assign fixed IP addresses to replacement equipment!

- **Reduce downtime** by eliminating the process of identifying the IP address and manually adding it in the replacement unit.
- **Increase safety** in the automation system by eliminating the potential for erroneous IP configurations.
- **Increase security** by monitoring all devices on the network that are making new IP address requests!
- **Reduce cost.** As a vendor neutral and fully compatible with DHCP services, this solution reduces the added cost in both equipment and support. Eliminating the complexity from modified Switch configuration firmware and/or unique hardware.

### Simple failure replacement mechanism "Remove-Replace-Relax"

Even with all the information it may be difficult for an electrician at 2 AM to replace a failed device. IntraVUE™ and its Auto-IP feature make the replacement of failed devices easier than even many fieldbus networks. Factory floor devices that provide data to supervisory or control systems have fixed IP addresses, which are much different than the office computer that uses a random IP address every time it is connected. The Auto-IP feature insures that the appropriate IP address is assigned to the replacement device. The simple procedure for the electrician is to disconnect the communication cable and power from the failed device, place the communication cable in the replacement, and the apply power. Then Auto-IP will take care of the rest.

## ivLINK

### What if documenting your network can be as easy as discover and export!

Leveraging the automatic discovery mechanism to provide "as-is" connection documentation will save days of having individuals check to make sure the point to point connections are correct. IntraVUE™ in minutes discovers the point-to-point

connections. The use of the ivLINK feature allows you to export this information into standard Excel or other packages. The report can also provide valuable details as to the devices with the highest traffic or most frequent upsets.

- Integrate information from IntraVUE™ into your HMI or SCADA packages.
- Import and export data collected by IntraVUE™ to standard spreadsheet or XML files collected by IntraVUE™ to standard spreadsheet or XML files.

Export CSV

Separator:  ,  ;  TAB  |

Export Device Properties

Exported Columns:

#1 ID	#14 Device View Icon Image
#1 IP Address	#15 Device View Thumbnail I
#2 MAC Address	#16 Location View Name
#3 Device View Name	#17 Location View Wireless1
#16 Location View Name	#18 Location View Wireless1
	#19 Location View Wireless2
	#20 Location View Wireless2

Export Events

Number of events:

ivLINK allows you to selectively choose values in IntraVUE to be exported to standard Windows packages such as Excel, or Access



• ABOUT THE COMPANY • ABOUT THE COMPANY • ABOUT THE COMPANY •

**Network Vision Inc.** specializes in the development of software to simplify the task of supporting Ethernet networks. As Ethernet connections expand beyond office PCs to include a variety of devices used in the Industrial Automation, Building Automation and Transportation Industries, **IntraVUE** will help the non-IT personnel responsible for the equipment quickly and easily troubleshoot device and connection problems.

Network Vision's **IntraVUE** uses sophisticated diagnostic routines and patented graphical tools that enable personnel to support even the most complex networking applications. This software allows the ability of local support, which reduces cost and increases network uptime. **IntraVUE** is today's answer for any application relying on the availability of both the network and connected devices.

We maintain a worldwide distributor channel to help our clients optimize the capabilities of Network Vision's products. We work closely with system integrators and engineering firms that further enhance capabilities of **IntraVUE**.

**To see the latest details we encourage you to visit our website at:**

**<http://www.intravue.net>**

## SEEING IS BELIEVING!

Sign up now for a 14 day Free Trial of  
**IntraVUE™**

Go to **[www.intravue.net](http://www.intravue.net)** for more details.

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