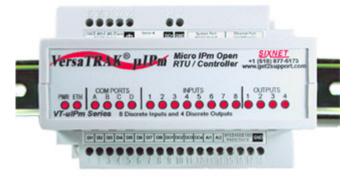
331 Ushers Road, P.O. Box 767, Clifton Park, NY 12065 USA +1 (518) 877-5173, Fax +1 (518) 877-8346

mailto: sales@sixnetio.com http://www.sixnetio.com

Micro-VersaTRAK µIPm™

An Installation-ready Interface for Real-time Plant Floor Data



and expandable SiteTRAK™ that everyone has been looking for.

The Micro-IPm is the programmable

Plant floor interface for:

- Real-time inventory management
- Remote process monitoring
- HVAC & energy management
- Environmental monitoring
- Low cost OEM applications

Ideal for ID tag applications – Serial ports link to code readers

- Datalogging and Timestamping Trending, alarm logging, & transaction recording
- Stand Alone Control of Remote Sites IEC 61131 ISaGRAF and also C++ programming via open source Linux
- Limitless Multi-user Connectivity Telephone, Internet, and wireless telemetry, 10/100 Ethernet plus up to 4 com ports
- Embedded LINUX Open Source Software Add applications, I/O drivers & much more
- An OEM's Dream Platform Pre-certified - Just add your application

Use this powerful industrial module as an applications-ready Remote Terminal Unit (RTU) or as an open platform for your own LINUX based application.

Inside this Compact RTU

Industrial PowerPC (true 32 bit data bus)

16 MB of fast dynamic memory

16 MB of flash disk

10/100 Auto-detecting real time Ethernet

Up to four flexible real-time serial ports

Up to 14 on-board discrete & analog I/O

Expandable with SIXNET I/O modules

Embedded Linux open source software

100% VersaTRAK RTU compatible

Powerful Windows software tools

Industrially rugged operation: -40 to 70°C

Certified to Perform:





Cenelec Zone 2







Benefits of LINUX open source software

High performance without compromise.
Wide open for complete flexibility.
Advanced development tools.
Complete documentation.
Available source code.
100% Internet enabled.
An OEMs dream platform.
Do anything, save money.
Instant Products to Market.
All this power at your fingertips.

Open source reduces technical risks.
Insure the long life of your systems.
µIPm is still a user-friendly VersaTRAK.

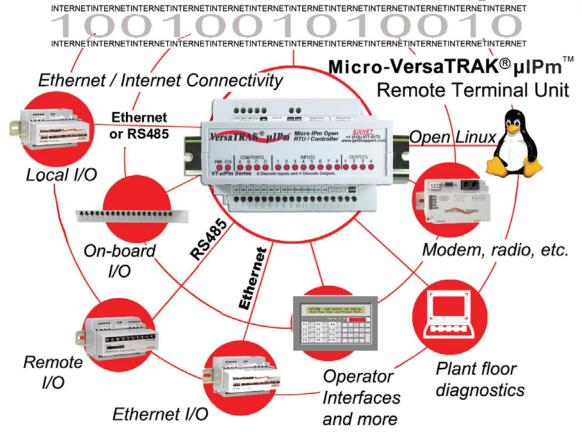
Supplied with powerful Windows software tools.

If you have special needs – the means to achieve your goals is in hand. LINUX is open UNIX – the operating system found in the big computers. UNIX has been around for 30 years, and its popularity is still growing. The LINUX software is invisible to the user – only access it if you choose to. When thousands of developers pool their resources everyone wins.

your goals is in hand.
d in the big computers.
larity is still growing.
access it if you choose to.
es everyone wins.

10/100 real-time Ethernet,
four serial ports and
flexible I/O expansion
connects this powerful
RTU to your application.

Five Ports Offer Limitless Connectivity!



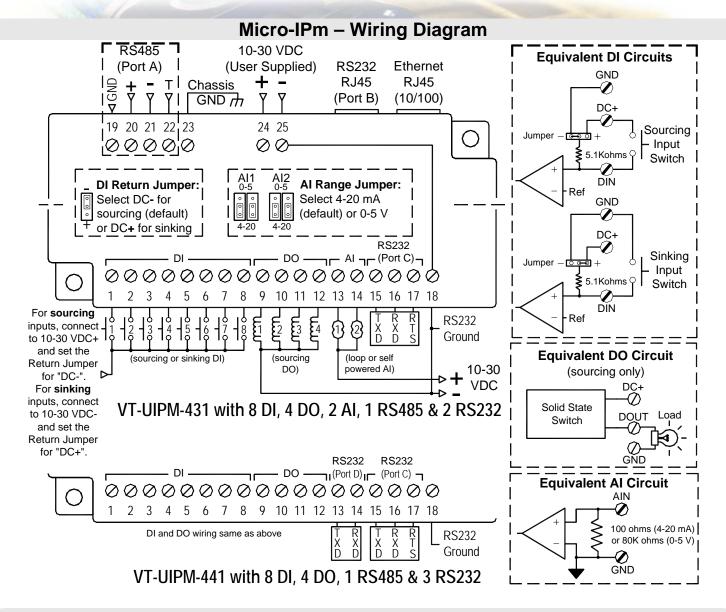


Micro-IPm Performance Specs

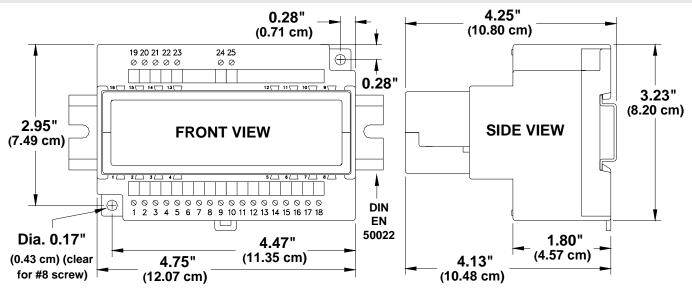
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Vibration IEC68-2-6 Hazardous locations UL 1604 / CSA C22.2/213 (Class 1, Div 2, Groups A,B,C,D); Cenelec EN50021 (Zone 2); ATEX Marine & Offshore Tested by DNV (Det Norske Veritas) to meet DNV No.2.4 Discrete Inputs 8 channels – sourcing or sinking (jumper/software selectable) Quaranteed ON voltage 9 VDC (Note: The threshold is factory adjustable to turn on at a lower voltage – contact SIXNET) Maximum voltage 30 VDC Guaranteed OFF voltage 5.0 VDC & 1.5 mA DC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms and 3 mA @ 24 VDC Input resistance & current 10K Ohms surge Input resistance & current 10K Ohms 10K Ohms Input resistance & current 10K Ohms 10K Ohms 10K Ohms Input resistance & current 10K Ohms 10K Oh		
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Specifications are subject to change. Consult factory for latest information.		

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Micro-IPm - Mechanical Dimensions





Advanced I/O Features and Capabilities

Discrete I/O Features

→ Sinking or Sourcing Discrete Inputs

All eight discrete inputs can be sourcing (ON when positive voltage is applied). All eight discrete inputs may also be configured as sinking inputs (switch closures to ground). There is a selection jumper in the module's base that is easily accessed by unplugging the logic module and opening the hinged door. You must also make a similar selection in the I/O Tool Kit software. The module performs a check to verify that the hardware and software selections match.

Adjustable Threshold Voltage on the Discrete Inputs

All eight discrete inputs may be modified to transition at a threshold voltage lower than the factory setting. This is accomplished by simply soldering an extra resistor into the base. Refer to the user manual for details.

→ Sourcing Discrete Outputs and Watchdog Output

All four discrete outputs are sourcing (positive voltage outputed when ON) with the standard 10-30V range. The first discrete output can be configured to be a watchdog output. This system performance monitor will be ON if the output circuitry, CPU operation and internal communications are functioning normally.

High Speed and Special Counter Inputs

All eight discrete inputs can be configured as counters with a flexible choice of modes. These counters report their values in corresponding 16-bit analog input registers. Options for fast (5 mS) or slow (25 mS for contact bounce filtering) response providing a maximum count rate of 100 Hz or 20 Hz counting, respectively. The 1st channel is a high speed counter and can count up to 10 KHz. Available counter modes are pulse, rate and run-time.

Analog I/O Features

→ Self-resetting Analog Input Protection

Each 4-20 mA input channel has a 100 ohm, high precision (0.1 percent) shunt across its input to develop a 2 volt signal when a full scale 20 mA input is applied. These shunts are located in the module's base, giving you the advantage of maintaining a continuous circuit even if the logic module is removed from the base. If excessive voltage is applied to an input, a self-resetting fuse will open to prevent the shunt from overheating.

→ Open Loop Detection on Analog Inputs

This module can detect and report an open instrumentation loop on its analog inputs. By allowing the module to report a negative value if the current falls below 4 mA, low limit logic in your DCS, PLC, RTU or computer can signal the loss of current. To enable this feature, select the "Go Negative Below 4 mA" software setting for each channel.

→ Reading Voltage Analog Inputs

For each analog input a jumper may be moved to convert the channel from 4-20 mA to 0-5 V. Then voltage operation must be configured in the I/O Tool Kit by selecting the appropriate range for the corresponding input.

Flexible I/O Expansion

Add EtherTRAK or RemoteTRAK I/O modules to either the Ethernet or RS485 port on a Micro-IPm for a total of up to 256 I/O points.



Ordering Information				***************************************		1	1		
Model	Description	DI	DO	Al	RS232	RS485	Ethernet		
VT-UIPM-431-H	Module with wiring base	8	4	2	2	1	10/100		
VT-UIPM-441-H	Module with wiring base	8	4	0	3	1	10/100		
Accessories *									
Ethernet or RS485 I/O	EtherTRAK or RemoteTRAK I/O modules for expansion								
VT-MODEM-1	Industrial telephone modem - rated for world-wide use								
RM-PS-024-01F	Universal 24 VDC power supply - 1 Amp								
SXTOOLS-#	I/O Tool Kit software for configuration, diagnostics, datalogging, & more								
ST-1131-256	ISaGRAF Workbench - IEC 61131 programming tools for 256 I/O								
PAK###-##	Complete Packaged System - designed, built, tested, and ready to install								
* See separate SIXNET	Ordering Guide for details on the								

Micro-IPm Applications



Chemical Delivery Systems

Improve the effectiveness of your Chemical Delivery Systems. Control concentrations, monitor usage, create reports, and reorder automatically. SIXNET can provide you with a customized solution to meet your customer's exact demands.

Tag ID Systems

Micro-IPm is the ideal plant floor interface for bar code and tag ID systems. These programmable RTUs store database tables, perform local control functions and connect to host systems.

Energy Management Systems

Record energy usage, monitor peak demand and perform load-shedding functions. DNP3 support records and reports time stamped events. Flexible programmability easily accommodates special requirements.

The Micro-IPm is a Programmable SiteTRAK

The Micro-IPm is ideal for all those SiteTRAK applications requiring datalogging and alarm detection at remote sites but need some programming or more I/O expansion.

Environmental Management

VersaTRAK IPm systems are an idyllic way to effectively meet EPA and other regulations for

continuous monitoring systems while minimizing costs. SIXNET makes it easy for you to collect your emissions data into your management software.

IPm is an OEM Solution

SIXNET will gladly private label or manufacture IPm units to your exact requirements. The VersaTRAK IPm CPU is available to OEMs who need an industrially hardened platform for new product designs or to web enable existing products. For more details check out http://www.linux4oems.com

SIXNET Industrial Solutions

SIXNET delivers a broad line of "Industrial Strength" products for process control, SCADA, and remote site management, including:

Industrial Phone Modems



Modular Ethernet I/O and RS485 I/O



Real-time Ethernet Switches



Request Your FREE Product CD at http://www.sixnetio.com



Contact your SIXNET Applications Engineer Today!

For the latest information, check out http://www.SIXNETio.com Micro-IPm Datasheet - Rev 12-Jan-07

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