Monitoring for ICT

VUTLAN Monitoring & Control Systems



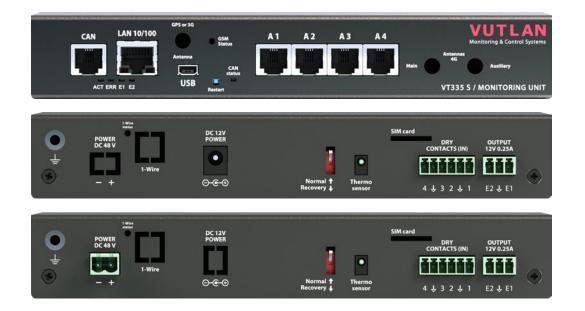
MONITORING UNIT / VT335 S

Environmental monitoring for telecommunication facilities, control of security breaches, temperatures, smoke, water leakages, voltages, air-flow and more.

Overview

CE RoHS

VT335 S is used for environment monitoring (room temperature, humidity, leakage, voltage, vibration, access, smoke, ...), notifications (SMS, SNMP, E-mail, Video, Alarm beacons) and control of cabinets, data centers, outdoor cabinets, telecom sites and other mission critical facilities.



HARDWARE:

- CAN port for digital sensors
- 4 AutoSense RJ-12 ports for analog sensors
- 4 dry contact inputs (terminal plugs included)
- USB port for web camera or for USB flash for saving logs
- 2x 12V 0.25A output relays
- 100 Mbit Ethernet port
- 12V or DC 48V power input
- External earthing
- LEDs: power, relays, alarm, CAN
- Embedded temperature sensor
- Internal LTE, GPS or GSM modem extension slot (ordered separately)
- Internal 1-Wire extension slot (ordered separately)

SOFTWARE:

- Web interface
- Virtual sensors & elements: Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers
- SNMP traps, SMS & E-mail notifications
- Supports SNMP v.1, v.2c, v.3
- Notifications: E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get
- Configurable embedded logic
- Sensor graphing
- Multilanguage support
- User Access and Permissions

OTHER:

- Full Two Year Global Warranty
- Additional warranties available
- Manufactured in E.U.

Technical Data

VT335 S has a Linux OS running an 300 MHz ARM CPU. It is TCP / IP compliant and runs lighttpd web server including HTTPS (SSL), SMTP, DHCP, SNMP, FTP, Syslog, Radius. Web interface is mobile ready and runs on HTML5.

Multilanguage interface

Web interface is has a multilanguage GUI and can be easily customized at request.

SNMP

All SNMP functions including SNMP v.1, v.2c, v.3 are supported.

Also supports CAN bus commands, easy to configure CAN data to SNMP gateway.

VT335 S has a Built-in Watchdog timer with NTP synchronisation.

SNMP Get function supported.

5-level sensor thresholds

Sensors with 5-level thresholds allows direct connection to the SCADA system. The thresholds are usually: very low, low, normal, warning and alarm. Sensor levels can be inverted.

Processor: ARM926EJ 300 MHz			
OS: Linux 3.10.32			
ROM: 512 Mbit NAND Flash			
RAM: 64 Mb			
Operating temperature: 0 to 60 °C			
Storage temperature: -25 to 85 °C			
Operating humidity: 0 to 90 %, non-condensing			
Storage humidity: 0 to 95 %, non-condensing			

Ethernet 10/100 Mbit port
Built-in clock with time synchronization
RADIUS access with Login
Device Management: Web, SNMP, manually via SMS, GPS (using VT760 LTE, GPS modem)
Built-in watchdog timer
Alert types: FTP, Syslog, SMTP or SNMP, SMS (GSM modem is ordered separately)
Network protocols: DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS

CE RoHS

Connect up to 4 IP Cameras

VT335 S can display pictures from a maximum of four IP cams simultaneously in several sizes, up to 640x480 pixels resolution.









Configurable logic

Web interface allows you to set up logic rules for alerts, notifications & actions to avoid unplanned downtime due to overdrawn circuits.

			Add new logic	sche	eme			>
Scheme na	me							
Disable sch	eme			n	D			~
Action	Element		State		Timeout	Repeat	Opera	tor
IF	Analog-5	\sim	high alarm	~	not used	not used	OR	~
IF	Dry-3	\sim	alarm	~	not used	not used	OR	~
IF	Dry-2	\sim	alarm	~	not used	not used	THEN	~
THEN	Analog Power	~	on	~	none	once	AND	~
THEN	Power-1	~	on	~	none	once	END	~



Virtual elements

- E-mail
- SNMP trap
- SMS notifications (USB modem is not included)
- Timers
- Triggers
- Pings
- IP Cams
- Groups
- Get SNMP

Sensor Graphing

GUI integrates and displays graphs of all sensor data. The individual graph (seconds, minutes, hours, days) for each sensor type can be selected. RRD tool is used to build an embedded database of sensor data. This data can be accessed in interface, or downloaded to Syslog or to FTP or saved on SD card. You can compare sensor data using a Multiplot by plotting a few sensor data along each other.



SNMP based NMS software

urrent Status	Current Network Status Last Updated: Wed Dec 30 23:11:38 EST 2009	Host Status Totals	Service Status Totals		
Tactical Overview	Updated every 90 seconds	Up Down Unreachable Pending	Ok Warning Unknown Critical Pending		
Map	Nagios® Core™ 3.2.0 - www.nagios.org	16 2 0 10	154 2 0 3 0		
O Hosts	Logged in as mwall	All Problems All Types	All Problems All Types		
O Services	View Service Status Detail For All Host Groups	2 28	5 159		
Host Groups	View Host Status Detail For All Host Groups				
Summary Grid	View Status Summary For All Host Groups View Status Grid For All Host Groups				
Service Groups					
Summary		Service Overview For All Host Group	os		
Grid					
Problems					
Services	Backup Servers (backup-servers)	DNS Servers (dns-servers)	File Servers (file-servers)		
(Unhandled)	Host Status Services Actions	Host Status Services Actions	Host Status Services Actions		
 Hosts (Unhandled) Network Outages 	backup0 🛕 UP 12 DK Q 😫	ns0 🛕 UP 20K Q 😫 🕺	data00 \Lambda UP 17.0K Q 🖳 🕂		
Quick Search:					
Quick Search.	backup1 🔬 DOWN 10 OK Q 🔒	ns1 👌 DOWN 🔽 OK 🔍 🖳 🗛			
	LDAP Servers (Idap-servers)	Mail Servers (mail-servers)	NRPE Hosts (nrpe-hosts)		
Reports	Host Status Services Actions	Host Status Services Actions	Host Status Services Actions		
Availability	Idap-1 🥶 UP 🛛 🛚 🕹 🗛	mail00 🔬 UP 🛛 🚺 🔍 🔍 🗛 🗛	backup0 🔬 UP 🛛 12 OK 🔍 🖳 🗛		
O Trends			backup1 A DOWN 10 OK Q SA		
Alerts					
History			data00 🔬 UP 17 OK Q 😫 🚠		
 Summary Histogram 			fax \Lambda UP 12.0K Q 😫 🗛		
Notifications			12 0K 0 0 8		
Event Log					
System					
O Comments			projects A UP		
O Downtime					
Process Info Performance Info	Offsite Servers (offsite)	Time Servers (time-servers)	UPS Hosts (ups-hosts)		
Scheduling Queue		Host Status Services Actions			
Configuration		and the second se	Host Status Services Actions		
	backup1 👌 DOWN 10.0K Q 💁	Idap-1 🝏 UP 🛛 🛚 🕄 🔍 🗳 🗛	backup0 🔬 UP 🛛 🛛 🛛 🔍 🖓 👫		
General	ns1 🔬 DOWN 20K Q 😫	Idap-2 🥑 UP 🛛 🛛 🕄 🖓 👫	backup1 👌 DOWN 10.0K		
Home					
Documentation					

NMS monitors your network 24/7 to timely alert you to issues before they become emergencies. Allow you to achieve instant awareness of IT infrastructure problems, so downtime doesn't adversely affect your business. Usual NMS software offers complete monitoring and alerting for servers, switches, applications, and services. By integrating Vutlan's environmental monitoring systems and PDUs, you achieve a complete control over your IT infrastructure in one place.

All Vutlan's master systems support SNMP v.1, v.2c, v.3. Required MIB files are included with all systems. Some of the supported NMS systems are listed below, for a full list please visit our website.

HP Network Node Manager			
IBM Tivoli			
PRTG Network Monitor			
Open NMS			
Monitorix			

ServersCheck
Zabbix
Nagios
Cacti
and many more

Infrastructure monitoring program (Nagios)

We have preconfigured Nagios to automatically work with any of our products. You can download and install Vutlan plugin directly into Nagios or download a disk image that includes VirtualBox, CentOS 6.5, Nagios 3.5.1 and Vutlan plugin preinstalled into Nagios.

Scalability

CAN sensors	Description			
VT408 / Extension unit	Allows to increase the number of sensors connected to any monitoring unit. Adds 8 analog senso			
VT430 / Rack control unit	The unit has all possibilities for rack control, PIR sensor for door control, 2 dry contacts, temperat and humidity sensors.			
VT440 / Dry contacts unit	Allows to increase the number of dry contacts connected to any Vutlan monitoring unit. Add 64 dry contacts.			
VT450 / Airflow unit	The unit has all possibilities to control temperature and up to six airflows.			
VT460 / Smoke, humidity & temperature sensor	Monitors occurrence of smoke, temperature and humidity inside the building.			
VT470 / PIR, vibration & temperature sensor	Sensor is needed for control of movement over an infra-red range and measurement of temperatu and vibration indoors.			
VT490 / Humidity & temperature sensor	Monitors temperature and humidity inside the building.			
Embedded modules	Description			
VT700 / GSM modem	Adds ability to receive and send SMS for control and notifications.			
VT760 / GSM modem	Adds 4G LTE and GPS connection. (Available September 2018)			
VT10 / 1-Wire module	Adds 1-Wire port to the system.			
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Analog sensors	Description			
VT420 / Converter 4-20mA	Converter of current loop 4-20mA is used for measurement of constant current on 4-20mA from different sensors and converting data into format of IP monitoring system. The system interface allows you to assign the sensor and to introduce the function data conversion.			
VT500 / Temperature sensor	For measurement of temperature indoors.			
VT501 / Outdoor temperature sensor	For measurement of temperature outdoors.			
VT510 / Humidity sensor	Measures relative humidity 10-95% indoors with relative accuracy 5%.			
VT520 / AC voltage monitor	Measures AC 110-240V			
VT530 / Access sensor	Sensor controls the status of a door or a window: opened, closed.			
VT540 / Vibration sensor	Detects vibration, allows daisy chain connection			
VT550 / Wind velocity meter	Measures airflow speed.			
VT560 / Smoke detector	Detector detects smoke indoors, allows daisy chain connection			
VT570 / PIR sensor	Infrared motion sensor			
VT590 / Leak sensor	When water is in contact with the metal cores, the sensor indicates the emergence of moisture.			
VT591 / Water leak cable sensor	When water is in contact with detection cable, sensor indicates the emergence of moisture.			
AC / DC meters	Description			
VT406 / HOS sensor transducer	Transducer is used together with HOS-100Q1 dc Hall current sensors and converting data into format of IP monitoring system.			
VT407 / HAT sensor transducer	Transducer is used together with HAT-100Q1 current transducer and transferring data into a moni- toring system.			
VT410 / DC voltage monitor	DC monitor is used for measurement of DC voltage up to 60V and converting data into format of IP monitoring system.			
VT520 / AC voltage monitor	Sensor is needed for measurement of AC 110-240V			
Accessories	Description			
VT122 / 19" panel	Holder / bracket for VT335 S monitoring unit. 1U rack mount, 19".			
VT124 / DIN mount	Allows to mount VT335 S on a DIN rail.			
VT123 / Wall mount brackets	Allow to mount the unit on the wall.			
	com for a complete list of Vutlan products. Products may change over time			

Please refer to www.vutlan.com for a complete list of Vutlan products. Products may change over time.

Security, Notifications and Alarms

VT335 S authorization is going through the Radius protocols, that highly increases resistance to forced attacks.

Notifications and alarms can be configured in "Logic menu" of web-interface using the states of sensors, timers, triggers and so on. In case of a problems the notification scheme can alert user via email, SMS or SNMP, automatically send pictures and data.

The complete status of the unit and / or sensors can be taken through HTTP, SMS, or SNMP, saved on FTP and Syslog servers or on installed SD card.

Support and Warranty

- Full One Year Global Warranty
- Additional 1 or 2 year warranties available
- Unlimited Lifetime Support.
- Free Firmware Updates.
- Full, Easy to Follow Documentation.

VT335 DC Features List

- Can connect 4G LTE+GPS or 3G GSM modem.
- Receive notifications of anomalous events via email, SMS / MMS, SNMP traps.
- Integrates with network management systems via SNMP v.1 and Encrypted SNMP v.3.
- Uses Linux operating system for maximum stability and flexibility.
- Web GUI for PC, smartphones and tablets; free firmware upgrades and utilities.
- Monitor up to 128 different sensors using expansion CAN units.
- Compatible with full range of different third-party sensors.
- Embedded web server displays sensor information and live video from connected cameras.
- Power input 12V or DC 48V.

Specifications

Dimensions

Size 206 x 33.1 x 79.4mm

Weight 1,2 Kg

Power Requirements

12V or DC 48V, 120 mA

Mounting

Desktop, 1U Rack mount, Wall, DIN rail

Power Consumption

6 Watt

Status indicators

LEDs: CAN, Power, Relays and Error

Accessories (ordered separately)

VT124 / DIN rail mount

VT122 / 19" 1U rack mount kit

VT123 / Wall mount brackets

Inputs

CAN open port

4 dry contact inputs

4 RJ-12 ports

Ethernet 10/100 Mbit/s

Network Interface

Ethernet 10/100 Mbit/s

Status Indicators

LED indication for Power / Network connectivity LED indication for CAN bus connection Error LED Relay LEDs

Outputs

2 * 12V 0.25A relay outputs

GSM, LTE, GPS SMA

1-Wire port

Operating Environment

Temperature: Min. -10° C, Max.80° C

Humidity : Min. 5%, Max. 80% (Non-Condensing)

Expansion Devices (ordered separately)

VT700 / GSM modem

VT760 / LTE, GPS modem

(available September 2018)

VT10 / 1-Wire module

Other

USB (for USB Camera or or USB Flash for saving logs) External earthing

Sensors

Embedded thermo sensor

Components

Manufactured in E.U.

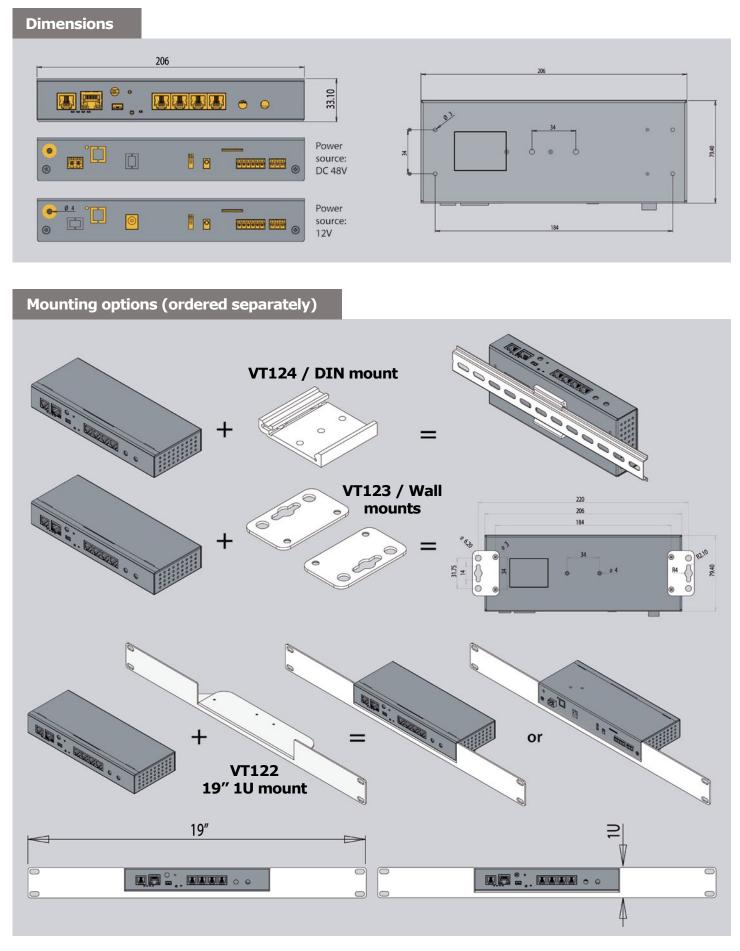
Basic package includes

- Monitoring unit
- RJ-45 1m patch cable
- Terminal plug 5.08 mm / 2P
- Terminal plug 3,5 mm / 6P
- Terminal plug 3,8 mm / 3P

- USB-Mini to USB cable
- Self-adhesive rubber foot 4 pcs
- Quick installation guide
- Warranty card

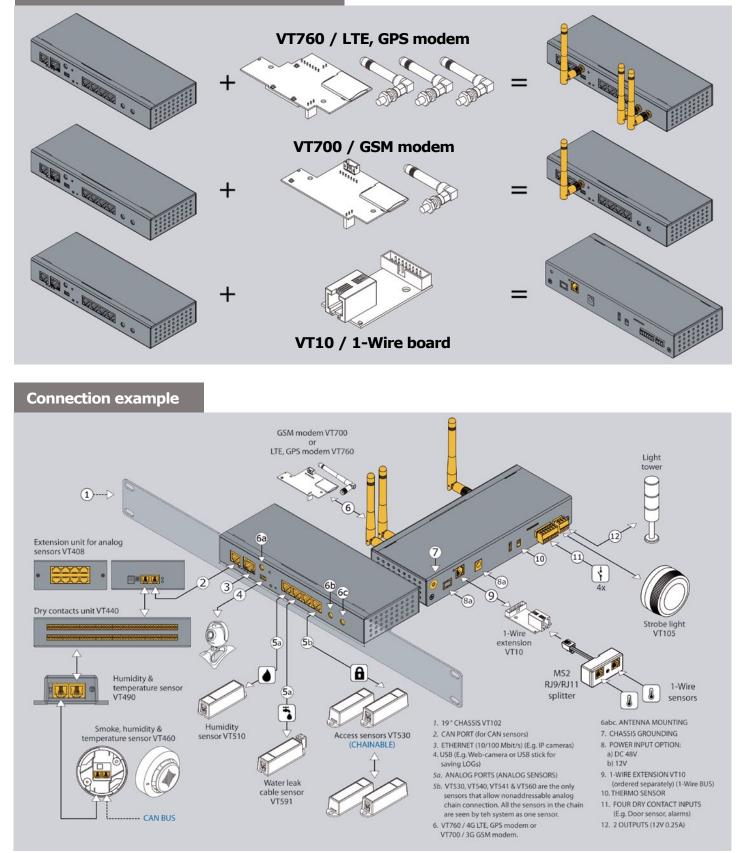
Monitoring unit / VT335 S

Mounting, Dimensions & Order options



Connection example

Mounting options (ordered separately)





www.vutlan.com



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