# ROOM GUARD VT325

**Environmental monitoring of small facilities, access control, monitoring of tempertures, smoke, water leakages, voltages and more.**

Compatible with all VT sensors.

# Overview

VT325 is used for environment monitoring (room temperature, humidity, leakage, voltage, vibration, access, smoke, ...), notifications (SNMP, E-mail, Video, Alarm beacons, SMS (USB modem is not included)) and control of cabinets, data centers, outdoor cabinets, telecom sites and other mission critical facilities.

HARDWARE:

- 2 AutoSense RJ-12 ports for analog sensors
- 2 dry contact inputs (terminal plug included)
- HS USB port for web camera
- LEDs: power, relays, alarm
- 2*12V 0.25A outputs / relays
- 1-Wire extension (VT10 / board ordered separately)
- 100 Mbit Ethernet port
- DC 12V power input
- External earthing

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:

- 1 Year warranty
- Manufactured in EU

# Technical Data

CE RoHS 2002/95/EC

VT325 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 customized at request.

## SNMP

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

VT325 has a Built-in Watchdog timer with NTP synchronisation.

SNMP Get function supported.

## Dublicator program

Easy-to-use Replica programm allows the user to setup all SNMP units within minutes. This program is designed to clone the unit settings and units firmware update. This is needed in case you have multiple units and it is required to copy all or some of the settings of one unit to other units.

## 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 (Using external USB modem) |
| Built-in watchdog timer |
| Alert types: FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem) |
| Network protocols: DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS |

# Connect up to 4 IP Cameras

VT325 can display pictures from a maximum of four IP cams simultaneously in several sizes, up to 640x480 pixels resolution.



# 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.
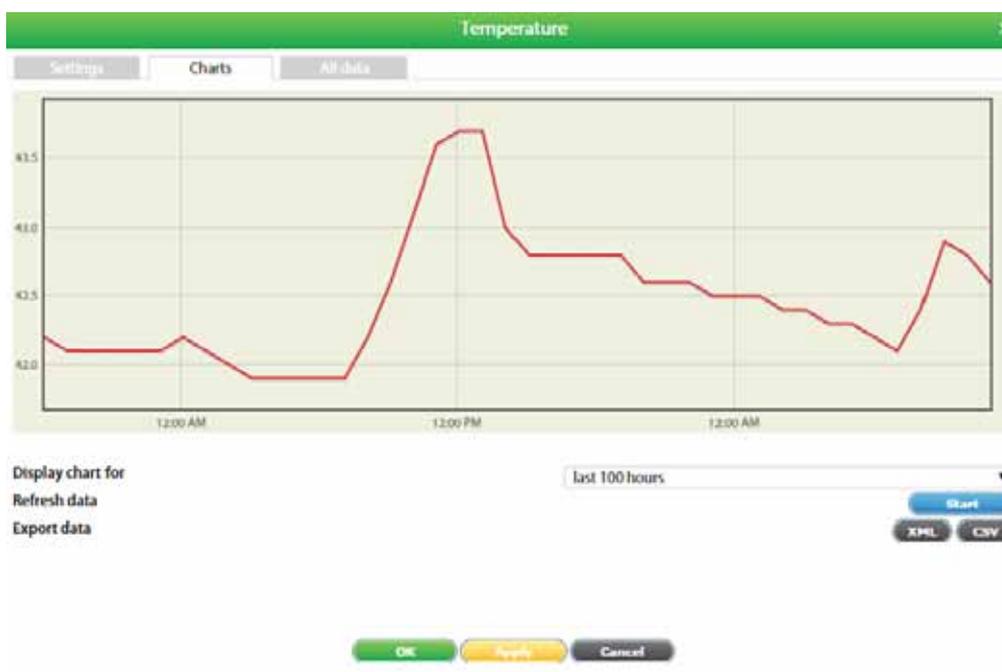
# Configurable logic

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



# Virtual elements

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

# SNMP based NMS software
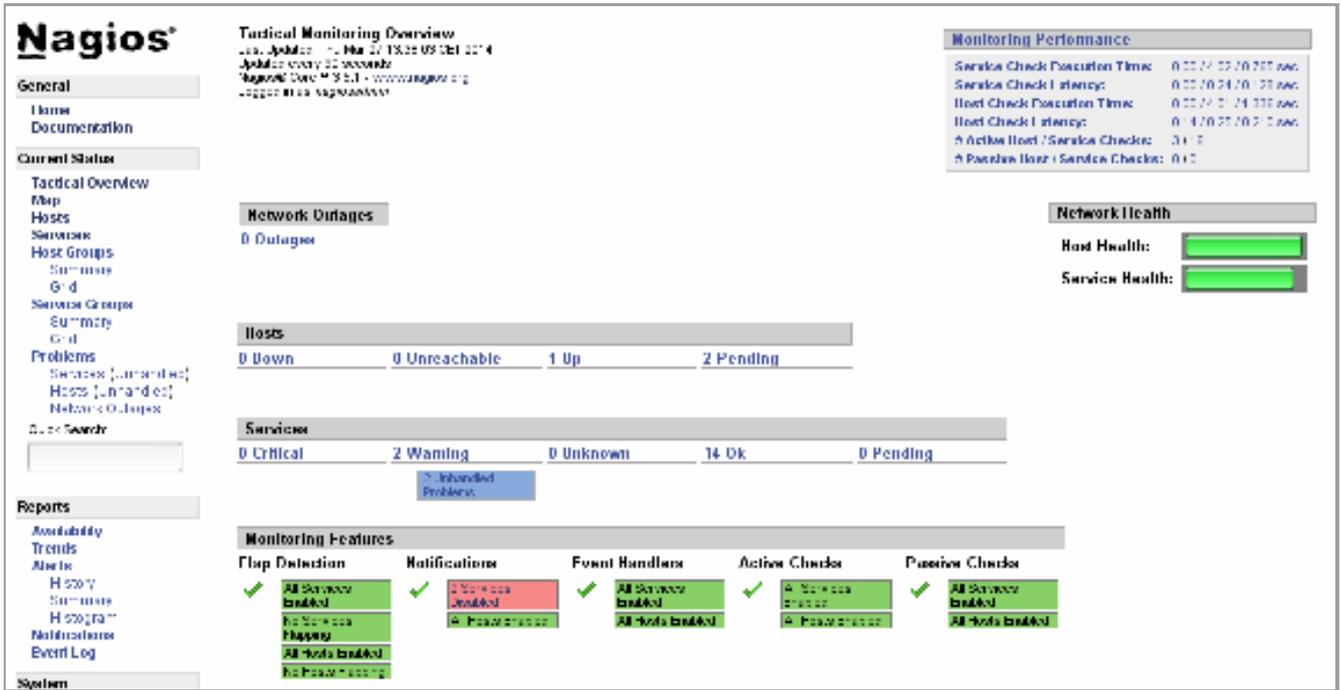


NMS monitors your network 24/7 to timely alert you to issues before they become emergencies. Allow you to achieve instant awareness of IT infrastructure problems, so downtime doesn't adversely affect your business. Usual NMS software offers complete monitoring and alerting for servers, switches, applications, 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

Following sensors and devices can be connected to Room Guard / VT325:

| Embedded modules | Description |
|---|---|
| VT10 / 1-Wire board | Allows to communicate with 1-Wire readers or sensors. |

| 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 |
| 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. |

| 1-Wire sensors | Description |
|---|---|
| VT581 / Temperature sensor | For measurement of temperature indoors. |
| VT583 / Outdoor temperature sensor | For measurement of temperature outdoors. |
| VT585/ Converter of thermocouples | For measurement of  criogenic temperatures. |

| AC / DC meters | Description |
|---|---|
| Current trnsducers, DC & AC voltage monitors | Please look for description brion at www.vutlan.com |

| Accessories | Description |
|---|---|
| VT112 / Rotary brackets | Allow to mount VT325 on the walls, inside a rack and etc. |

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

# Security, Notifications and Alarms

VT325 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
- Unlimited Lifetime Support.
- Free Firmware Updates.
- Full, Easy to Follow Documentation.
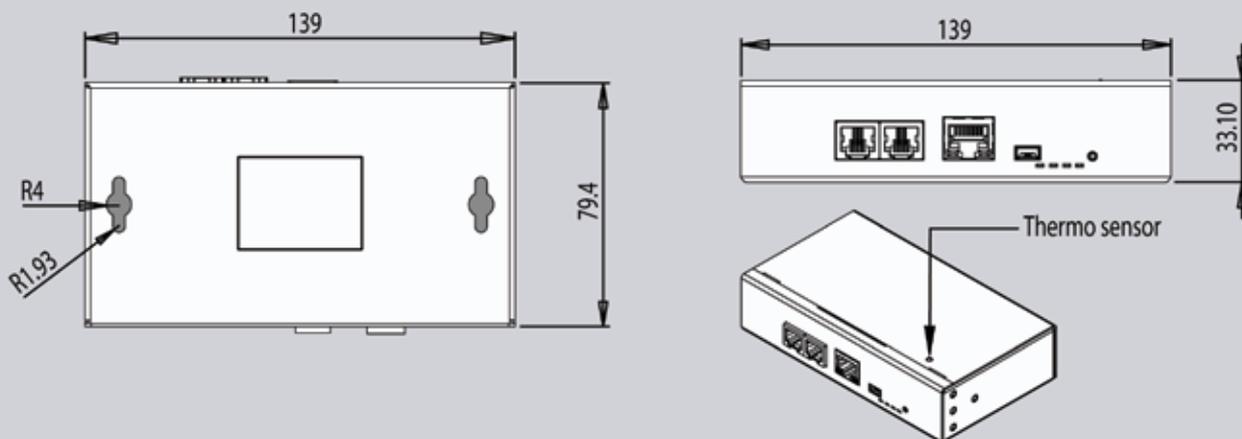
# VT325 Features List

- Receive notifications of anomalous events via email, SNMP traps, SMS / MMS (USB modem not included).
- 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.
- Compatible with full range of different third-party sensors
- Embedded web server displays sensor information and live video from connected cameras.

# Specifications

| Dimensions |
| --- |
| Size 140 x 34 x 80 mm |
| Desktop |
| Weight 0,5 Kg |

| Power Requirements |
| --- |
| DC12V, 1A |

| Mounting |
| --- |
| Desktop<br>Wall mounting using VT112 (ordered separately) |

| Power Consumption |
| --- |
| 3-10 Watt, 0.12 A |

| Status indicators |
| --- |
| LEDs: Power, Relays and Error |

| Inputs |
| --- |
| 2 RJ-12 ports |
| 2 dry contact inputs |

| Network Interface |
| --- |
| Ethernet 10/100 Mbit/s |

| Status Indicators |
| --- |
| LED indication for Power / Network connectivity |
| LED indication for two relays (E1, E2) |
| Error Led |

| Outputs |
| --- |
| 2 * 12V 0.25A outputs |

| Operating Environment |
| --- |
| Temperature: Min. -35° C, Max.80° C |
| Humidity : Min. 5%, Max. 80%  (Non-Condensing) |

| Expansion Devices |
| --- |
| VT10 / 1-Wire Board (ordered separately) |

| Other |
| --- |
| HS USB (for USB Camera or USB modem or USB Flash) |
| External earthing |

| Components |
| --- |
| Manufactured in EU. |

# Mounting, Dimensions & Order options

## Dimensions



Thermo sensor

## Order options (ordered separately)



**VT112 / Rotary brackets**

+ = 

**VT10 / 1-Wire board**

+ =
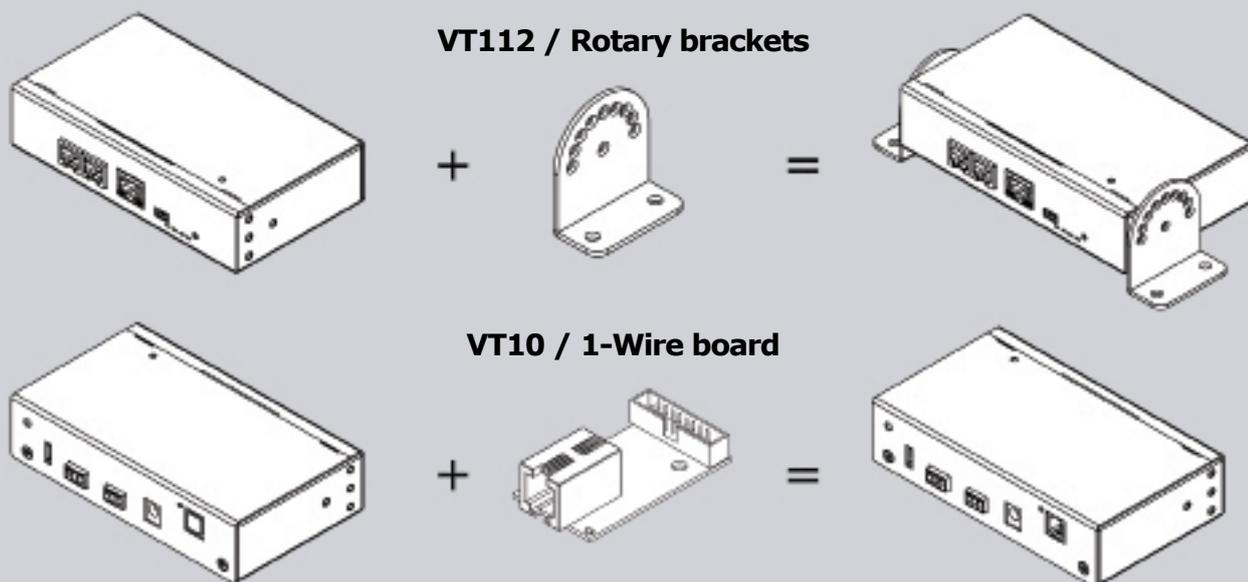
# Connection example
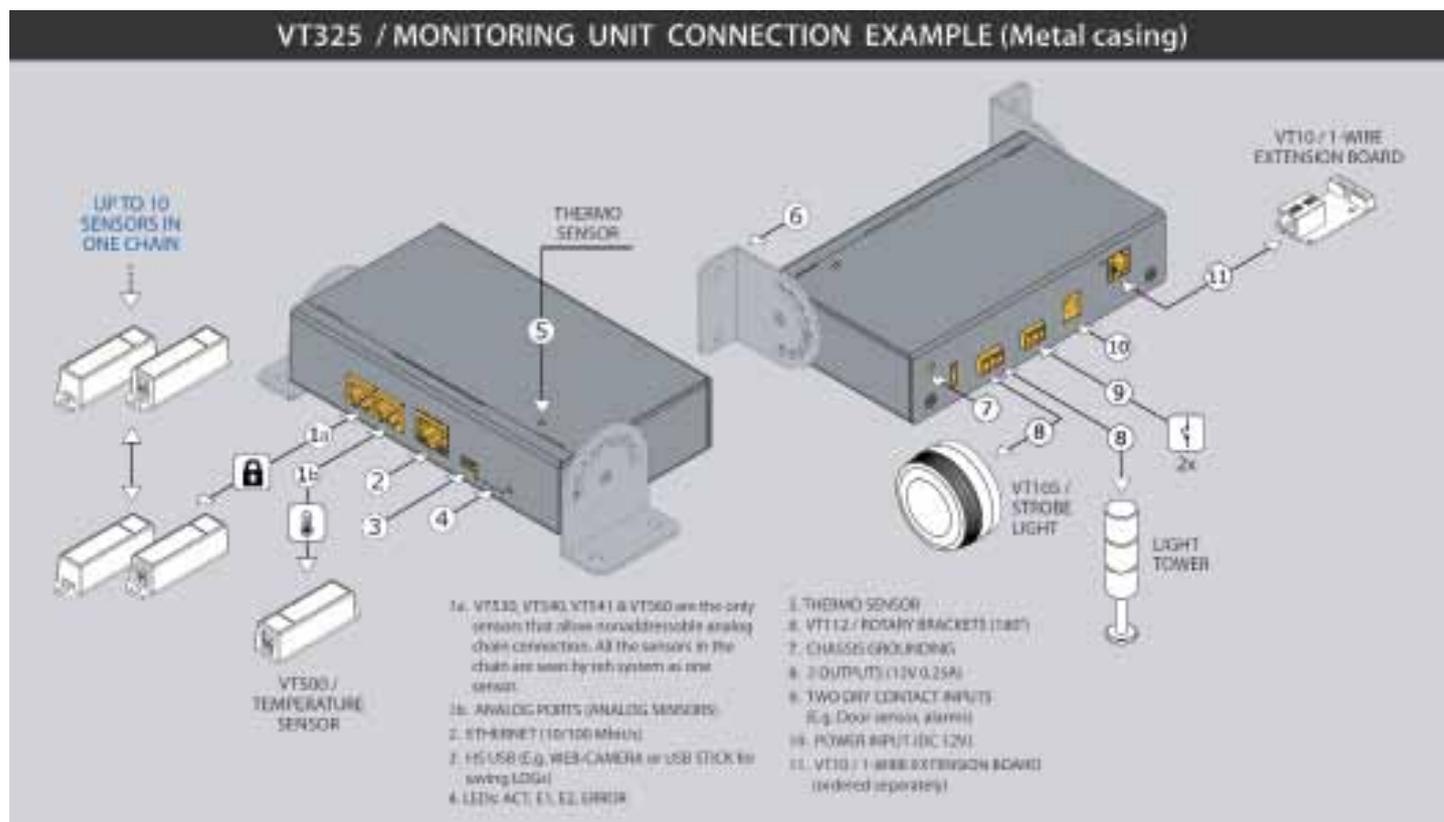


# Basic package includes

- Monitoring unit
- Power adapter 12V, 1A
- RJ-45 1m patch cable
- Terminal plug 3,5 mm / 3P
- Terminal plug 3,81 mm / 3P

- USB-MiniUSB cable
- Self-adhesive rubber foot - 4 pcs
- Installation manual
- Warranty card

- **28 branches**
- **19 countries**

**www.vutlan.com**

# VUTLAN
Monitoring & Control Systems

# Data center & Telecom environment monitoring and control

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