Environmental Infrastructure monitoring

VUTLAN
Monitoring & Control Systems

ROOM GUARD VT335

Environmental monitoring of any facilities, control of security breaches, temperatures, smoke, water leakages, voltages and more.

Compatible with all VT sensors.
Provides a complete environmental, access-control and security monitoring solution.

Overview

CE RoHS 2002/95/EC

VT335 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.
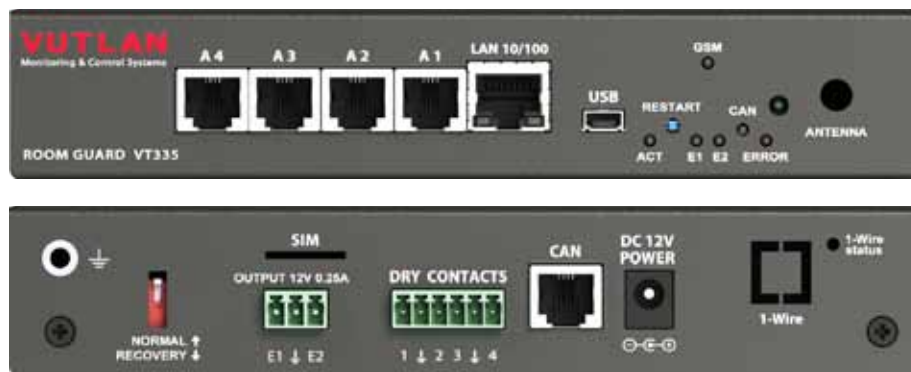
HARDWARE:

- CAN port for digital sensors
- 4 AutoSense RJ-12 ports for analog sensors
- 4 dry contact inputs (terminal plugs included)
- HS USB port for web camera or for USB flash for saving logs
- 2*12V 0.25A output relays
- 100 Mbit Ethernet port
- DC 12V power input
- External earthing
- LEDs: power, relays, alarm, CAN
- Embedded temperature sensor
- Internal 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:

- 2 Year warranty (Extended 1, 2 or 3 year warranties available)
- Manufactured in EU

Technical Data

VT335 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 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
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

Connect up to 4 IP Cameras

VT335 can display pictures from a maximum of four IP cameras 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
- Timers
- Triggers
- Pings
- IP Cams
- Groups
- Get SNMP

SNMP based NMS software
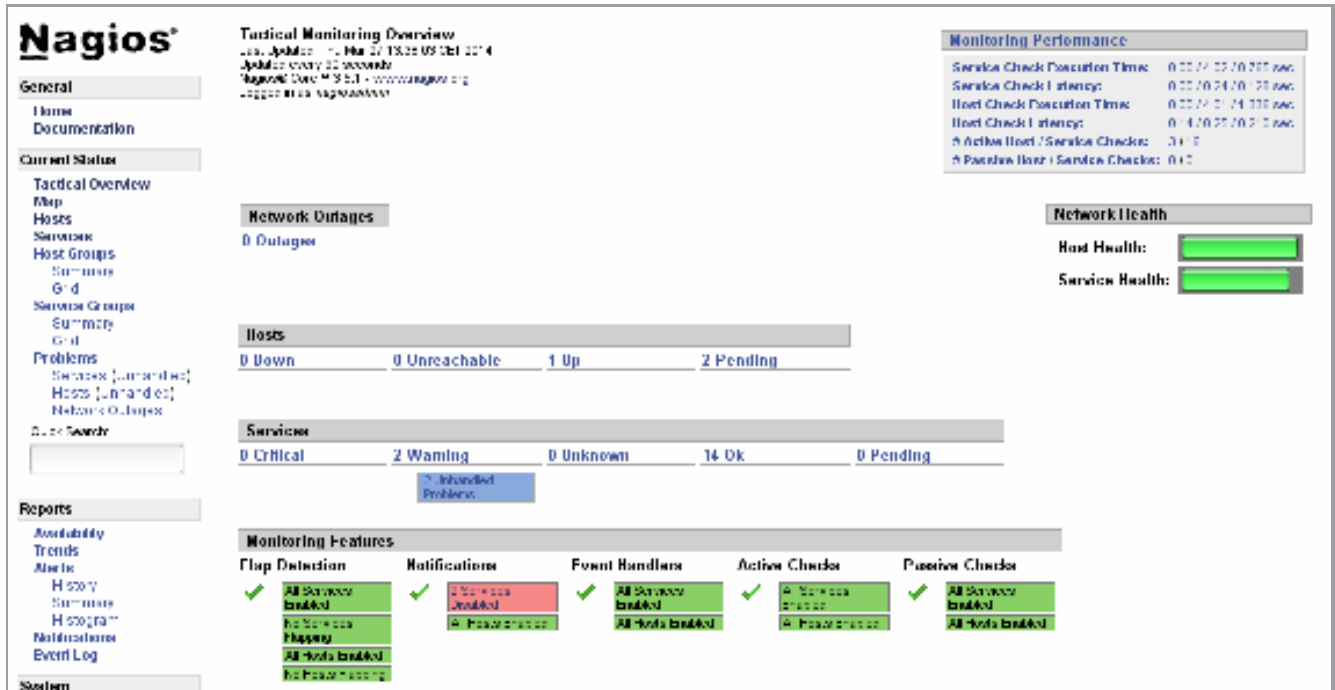
NMS monitors your network 24/7 to timely alert you to issues before they become emergencies. Allow you to achieve instant awareness of IT infrastructure problems, so downtime doesn't adversely affect your business. Usual NMS software offers complete monitoring and alerting for servers, switches, applications, 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	ServersCheck
IBM Tivoli	Zabbix
PRTG Network Monitor	Nagios
Open NMS	Cacti
Monitorix	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 / VT335:

CAN sensors	Description
VT408 / Extension unit	Allows to increase the number of sensors connected to any monitoring unit. Adds 8 analog sensors.
VT430 / Rack control unit	The unit has all possibilities for rack control, PIR sensor for door control, 2 dry contacts, temperature and humidity sensors.
VT440 / Dry contacts unit	Allows to increase the number of dry contacts connected to any Vutlan monitoring unit. Adds 32 or 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 temperature 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.
VT10 / 1-Wire module	Adds 1-Wire port to the system.

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.

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 monitoring 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
VT102 / 19" panel	Holder / bracket for VT335 monitoring unit. 1U rack mount, 19".

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

Security, Notifications and Alarms

VT335 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.

EMC compatability

All Vutlan's systems have passed electromagnetic compatibility tests. This ensures that our systems work correctly inside strong electromagnetic fields without any interference.

Support and Warranty

- Full Two Year Global Warranty (Extended 1, 2 or 3 year warranties are available)
- Unlimited Lifetime Support.
- Free Firmware Updates.
- Full, Easy to Follow Documentation.

VT335 Features List

- 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.

Specifications

Dimensions
Size 180 x 33 x 80 mm
Desktop, 1U Rack mount standard
Weight 0,7 Kg

Power Requirements
DC12V, 1A

Mounting
19" and desktop

Power Consumption
3-10 Watt, 0.12 A

Status indicators
LEDs: CAN, Power, Relays and Error

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 SMA
1-Wire port

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

Expansion Devices
VT700 / GSM modem
VT10 / 1-Wire module

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

Sensors
Embedded thermo sensor

Components
Manufactured in EU.

Mounting, Dimensions & Order options
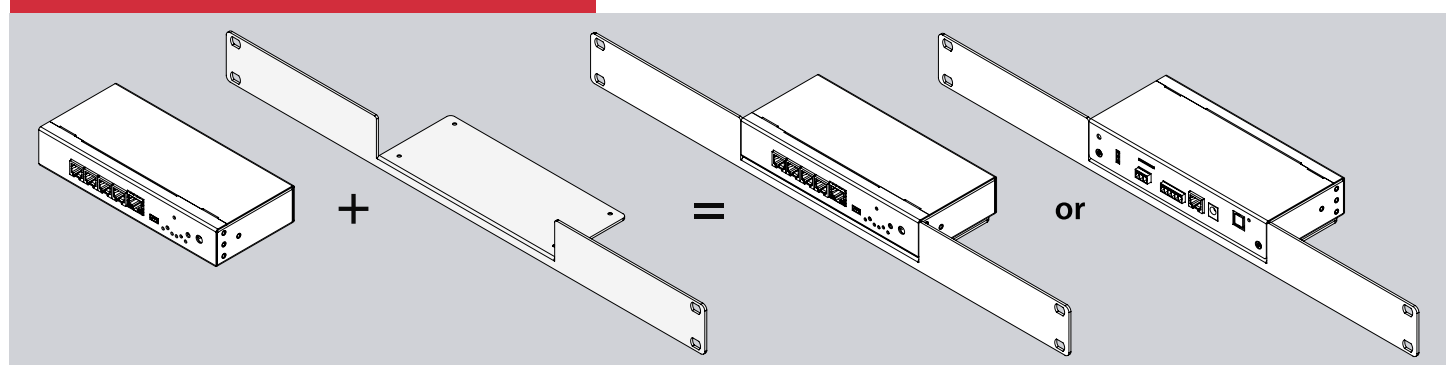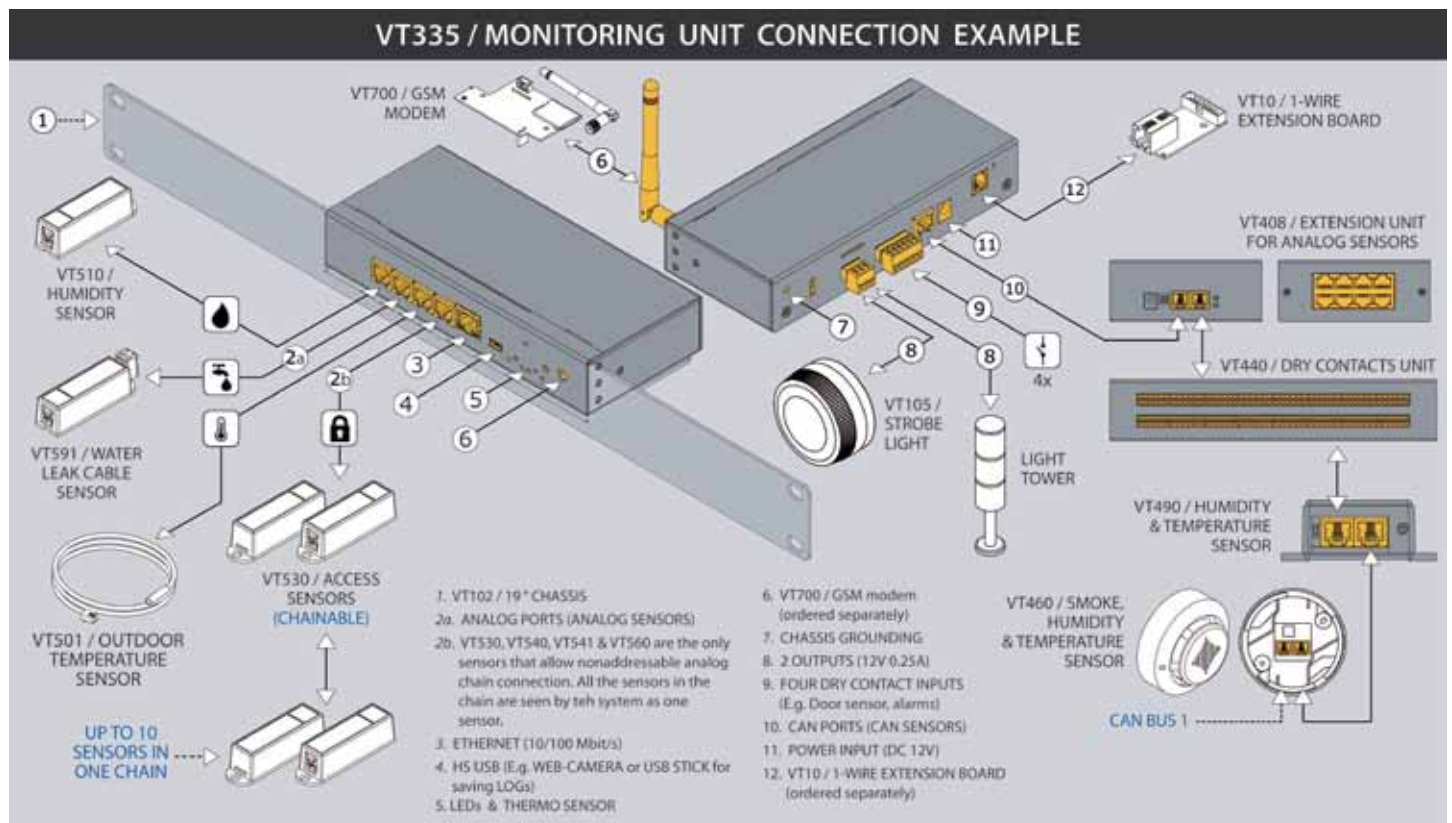
Dimensions (VT335)
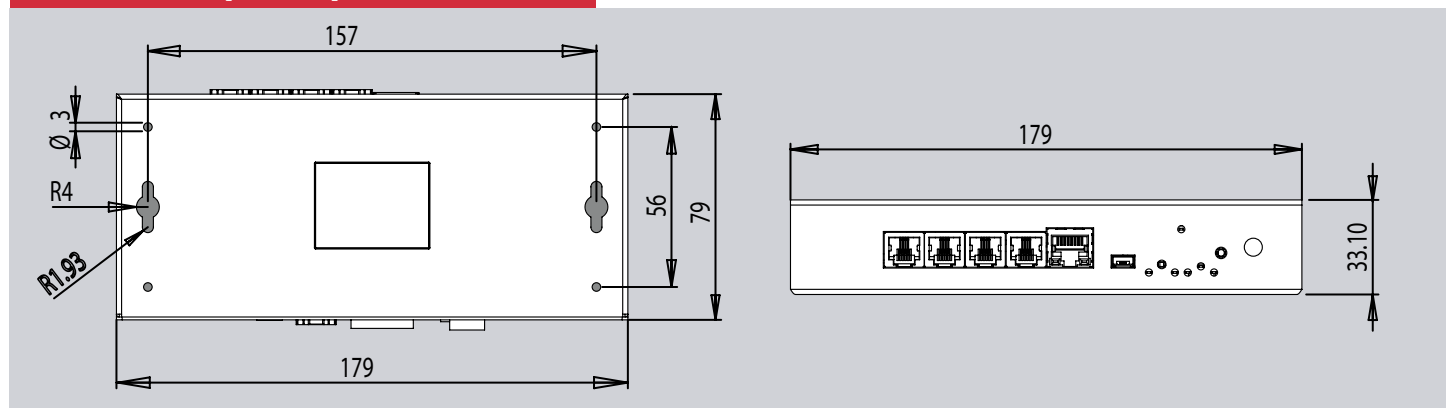
Dimensions (VT335 + VT102)
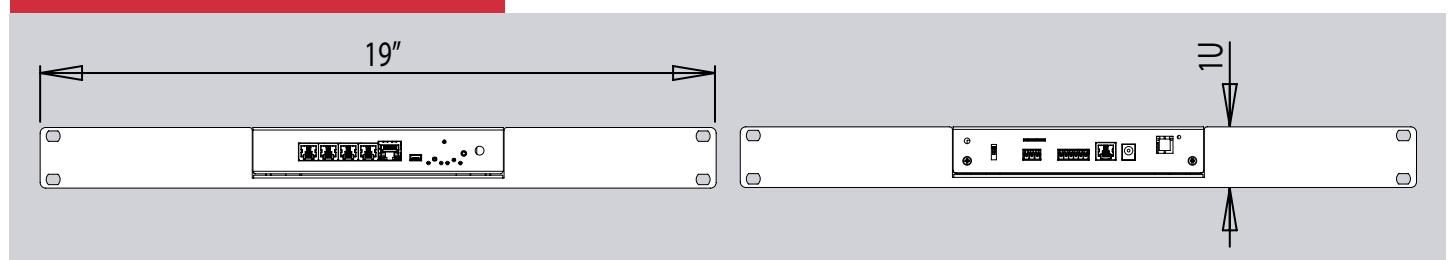
Mounting options (VT335 + VT102)

Order options (ordered separately)

VT700 /GSM modem

VT10 / 1-Wire board
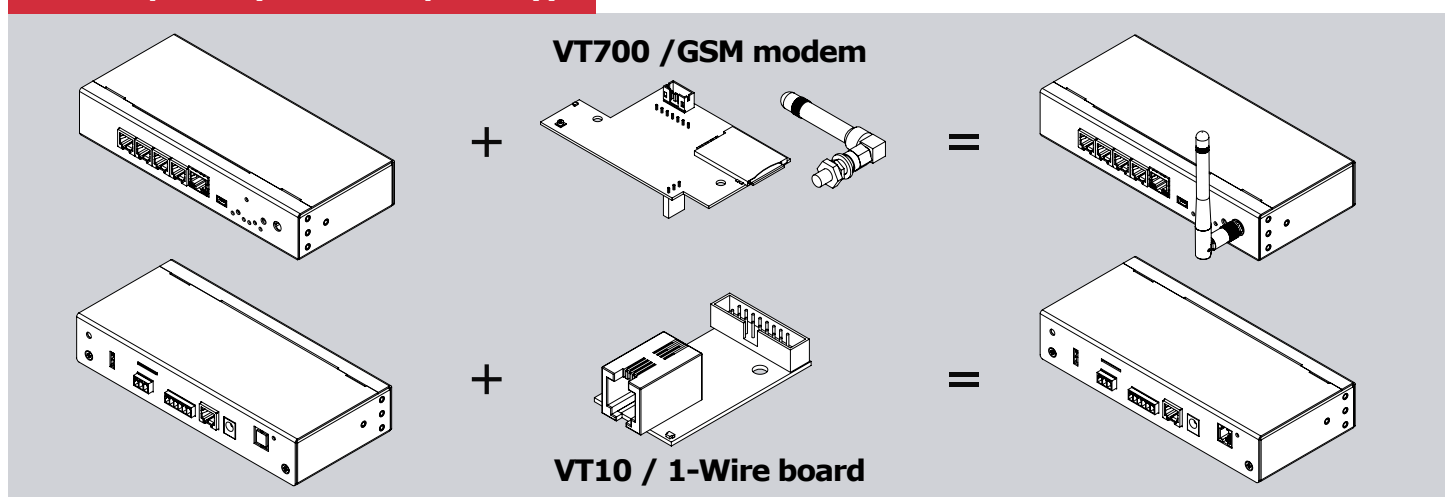
Connection example

Basic package includes

- Monitoring unit
- Power adapter 12V, 1A
- RJ-45 1m patch cable
- Terminal plug 3,5 mm / 6P
- Terminal plug 3,8 mm / 3P

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

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