VUTLAN
Monitoring & Control Systems

VT604 / Switched PDU with 4 outlets

Device is used for load management and allows to switch on/off or reboot up to 4 outlets. It has built-in temperature sensor, can connect 2 additional sensors, 2 dry contacts, two 12V devices, GSM modem & USB-cam.

Compatible with all VT sensors.

Overview

CE RoHS
2002/95/EC

VT604 has 4 switched outlets. They can be controlled individually or as a group using web interface. Outlets can also be managed with predefined logic. "VT604" is also used for infrastructure 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.
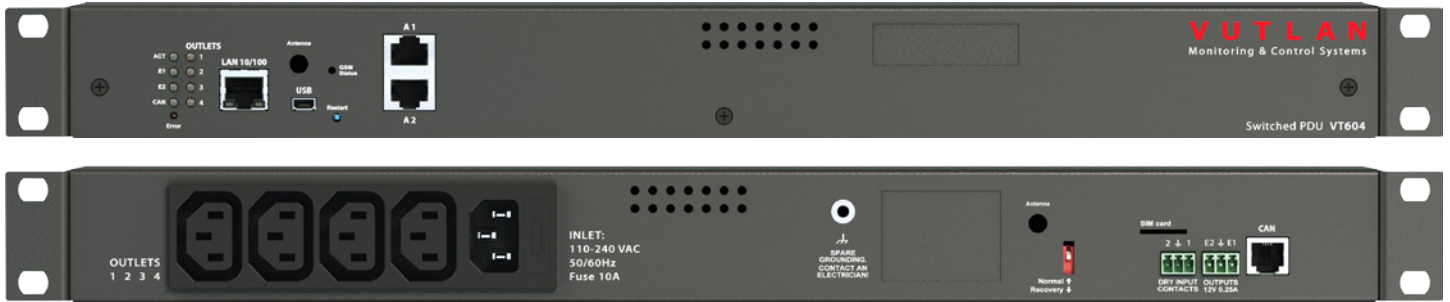
HARDWARE:

- Inlets C14 (240V, 10A)
- 4 outlets C13 (110-240 VAC, 50/60Hz)
- CAN port for digital sensors
- 2 AutoSense RJ-12 ports for sensors
- 2 dry contact inputs
- USB port for web camera or for USB flash for saving logs
- Two 12V 0.25A output relays
- 100 Mbit Ethernet port
- LEDs: for 4 outlets
- LEDs: system status, relays, errors & CAN
- Onboard temperature sensor (1%)
- Internal GSM modem extension slot (GSM modem is ordered separately)

SOFTWARE:

- Web interface
- Outlets switching panel in 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
- Manufactured in E.U.

Technical Data

"VT604" 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.

"VT604" has a Built-in Watchdog timer with NTP synchronisation.

SNMP Get function supported.

CAN bus connection

Up to 8 CAN devices can be connected to VT604. When plugged in, user needs to configure CAN units, and save configuration, then after reboot or energy lost, the system automatically reconfigures sensors.
Using such CAN bus with max length 300 m, it is possible to connect up to 30 different sensor elements to a single monitoring unit.

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.

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Processor: ARM926EJ 300 MHz	**Ethernet 10/100 Mbit port**
OS: Linux 3.10.101	**Built-in clock with time synchronization**
ROM: 512 Mbit NAND Flash	**RADIUS access with Login**
RAM: 64 Mb	**Device Management: Web, SNMP, manually via SMS**
Operating temperature: 0 to 60 °C	**Built-in watchdog timer**
Storage temperature: –25 to 85 °C	**Alert types: FTP, Syslog, SMTP or SNMP, SMS (GSM modem is ordered separately)**
Operating humidity: 0 to 90 %, non-condensing	**Network protocols: DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS**
Storage humidity: 0 to 95 %, non-condensing	

Outlet managememt

VT604 has 4 switched outlets. They can be controlled individually or as a group using web interface. Outlets can also be managed with predefined logic.

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 or USB flash. You can compare sensor data using a Multiplot by plotting a few sensor data along each other.
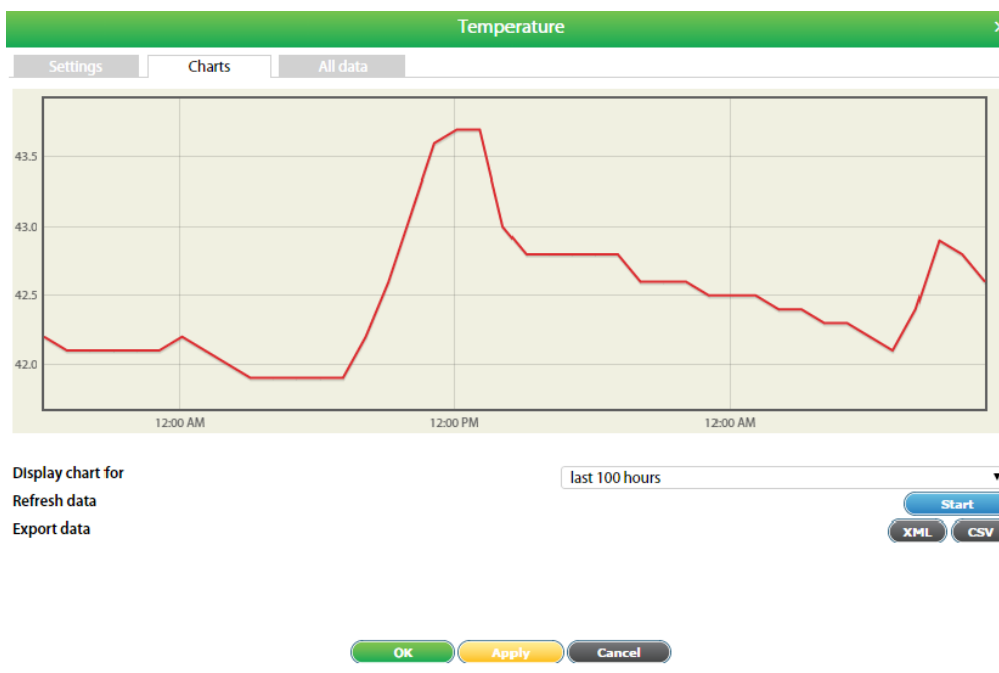
Configurable logic

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

Connect up to 4 IP Cameras

"VT604" can display pictures from a maximum of four IP cameras simultaneously in several sizes, up to 640x480 pixels resolution.
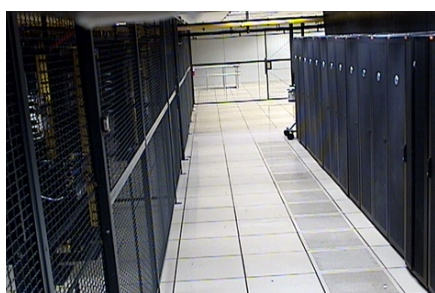
SNMP based NMS software
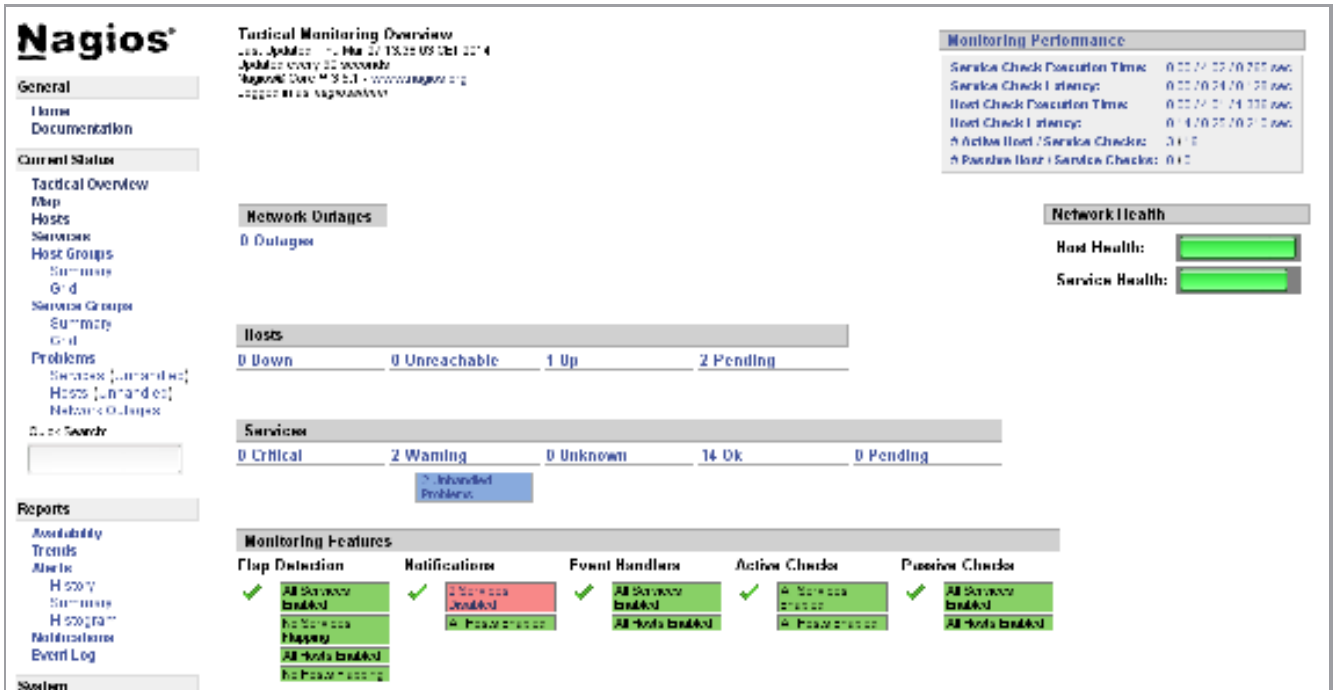
NMS monitors your network 24/7 to timely alert you to issues before they become emergencies. Allow you to achieve instant awareness of IT infrastructure problems, so downtime doesn't adversely affect your business. Usual NMS software offers complete monitoring and alerting for servers, switches, applications, 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 "VT604 / Switched PDU":

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.
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 (ordered separately)	Description
VT700 / GSM modem	Adds ability to receive and send SMS for control and notifications.

Analog sensors	Description
VT11 / Dry contact OUT	Switchable contact. Can be used together with equipment, for example for switching ON/OFF air conditioners.
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 (ordered separately)	Description
VT112 / Rotatable mounting brackets	Package includes 2 rotary brackets which allow to mount monitoring systems at an angle.

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

Security, Notifications and Alarms

"VT604" 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.

Virtual elements

- E-mail, SNMP trap, SMS notifications
- Timers
- Triggers
- Pings
- IP Cams
- Groups
- Get SNMP

Support and Warranty

- Full Two Year Global Warranty
- Unlimited Lifetime Support
- Free Firmware Updates
- Full, Easy to Follow Documentation

VT604 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 30 different sensors.
- Compatible with full range of different third-party sensors.
- Embedded web server displays sensor information and live video from connected cameras.

Specifications

Dimensions
Size 440 x 44.45 (1U) x 79 mm
19" 1U Rack mount
Weight 1. 5 Kg

Power Requirements
230V / 10A

Mounting
19" 1U Rack mount Desktop (rubber feet included) Accessory "VT112 / Rotatable brackets" (allow wall mounting)

Power Consumption
10 W

Accessories
VT112 / Rotatable mounting brackets

Inputs
1 inlets
CAN open port
2 dry contact inputs
2 RJ-12 sensor ports
Ethernet 10/100 Mbit/s

Network Interface
Ethernet 10/100 Mbit/s

Status Indicators
LEDs: status of 4 outlets
LEDs: CAN, Power, Relays and Error

Outputs
4 C13 outlets
2 * 12V 0.25A relay outputs
GSM SMA

Operating Environment
Temperature: Min. -10° C - Max.80° C
Humidity : Min. 5%, Max. 80% (Non-Condensing)

Expansion Devices
VT700 / GSM modem

Other
USB (for USB Camera or or USB Flash for saving logs)
10A fuse

Sensors
Temperature sensor (1%)
Power supply voltage sensor (1%)

Components
Manufactured in EU.

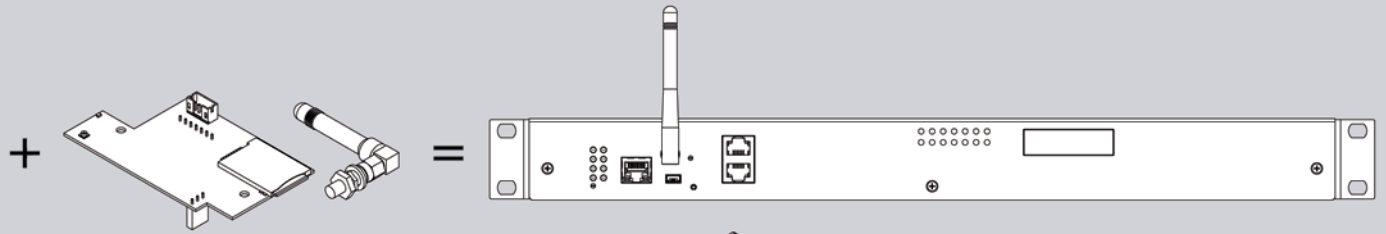# Dimensions & Order options

Dimensions (VT604)
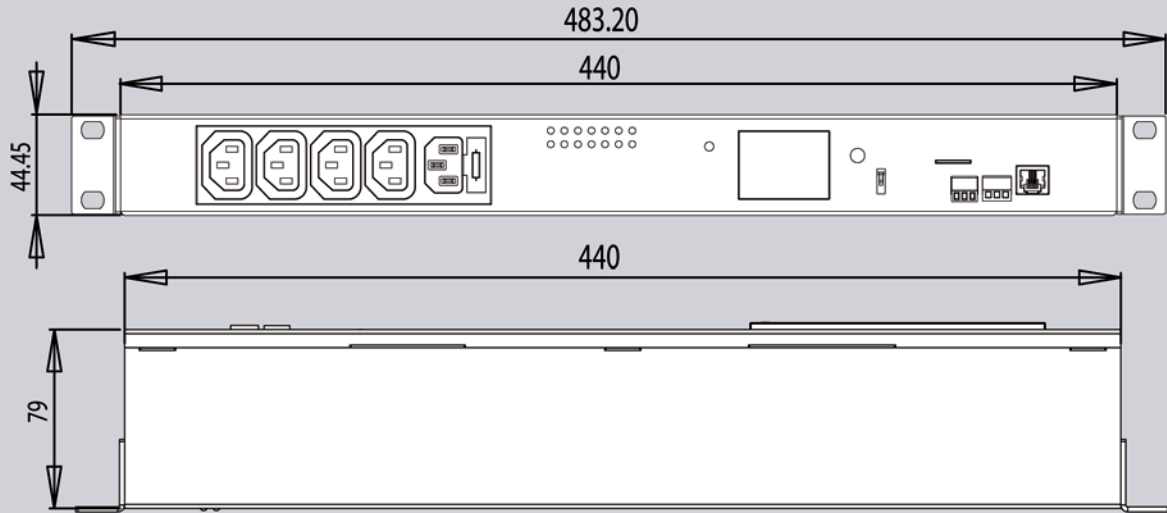
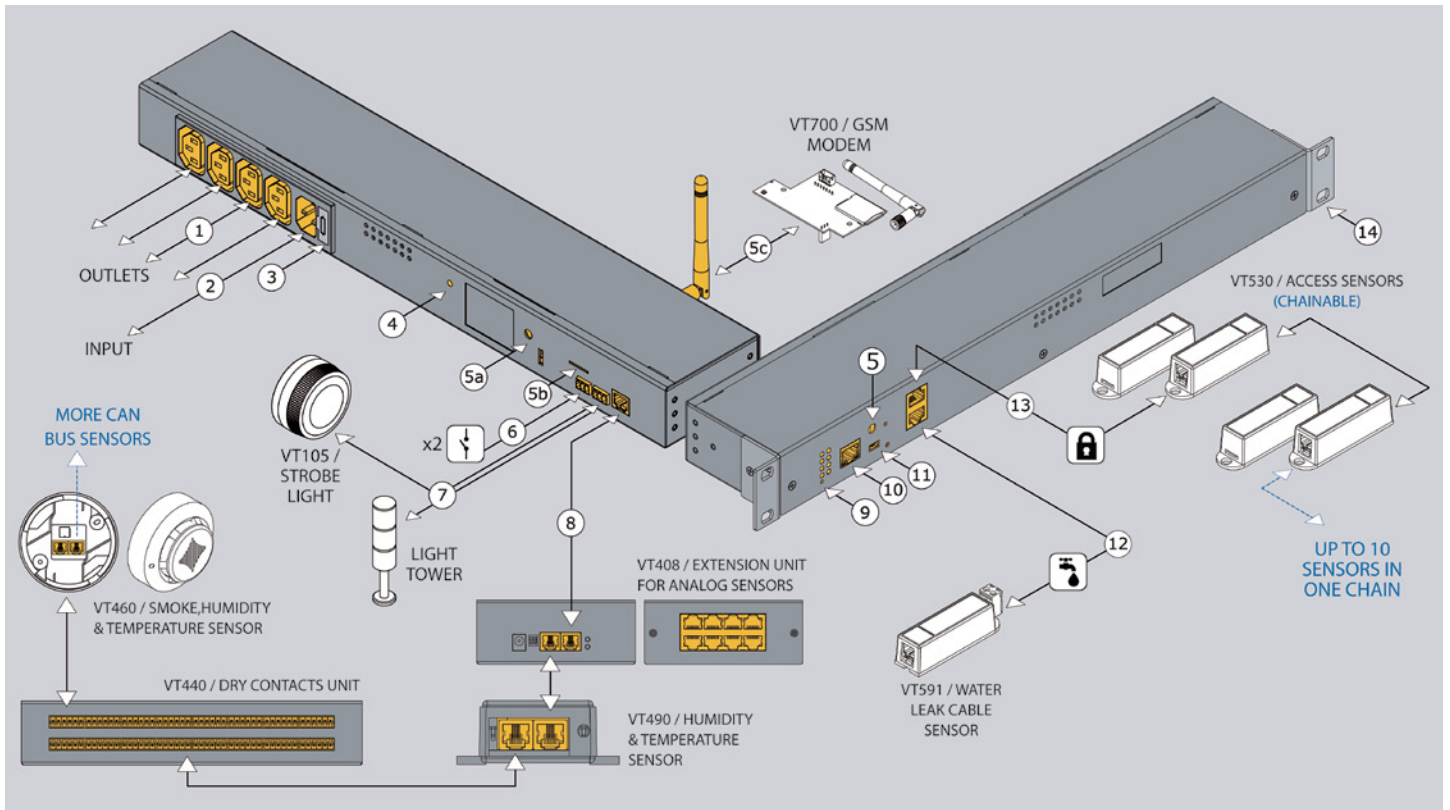## Order options (ordered separately)

VT604 / Switched PDU

+ VT700 /GSM modem =

+ VT112 / Ratatable brackets =

Connection example

VT700 / GSM MODEM

VT530 / ACCESS SENSORS (CHAINABLE)

OUTLETS

INPUT

MORE CAN BUS SENSORS

VT105 / STROBE LIGHT

VT460 / SMOKE, HUMIDITY & TEMPERATURE SENSOR

VT440 / DRY CONTACTS UNIT

LIGHT TOWER

VT408 / EXTENSION UNIT FOR ANALOG SENSORS

VT490 / HUMIDITY & TEMPERATURE SENSOR

VT591 / WATER LEAK CABLE SENSOR

UP TO 10 SENSORS IN ONE CHAIN

Basic package includes

- 19" rack brackets - 2 pcs
- M3 x 8 Phillips flat-head screws - 6 pcs
- EU Schuko C13 0.5 мм2 230V 10A cable
- RJ-45 1m patch cable
- Self-adhesive rubber foot - 4 pcs

- Terminal plug 3 pins, 3.81 mm - 1 pcs
- Terminal plug 3 pins, 3.5 mm - 1 pcs
- Short description and connection guide
- Warranty card

33 countries