Environmental Infrastructure monitoring

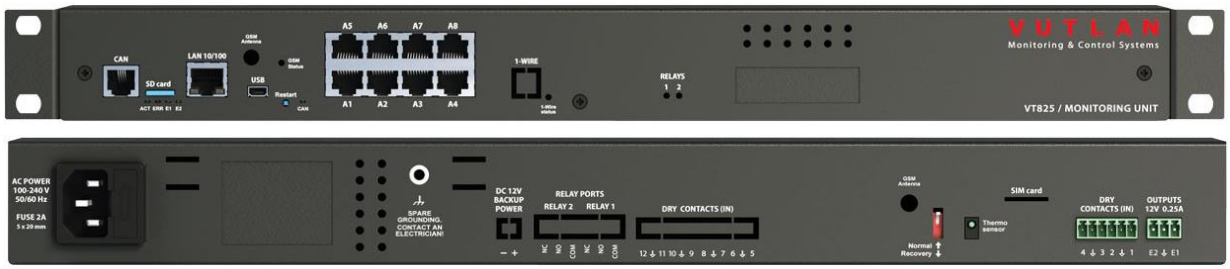
VUTLAN
Monitoring & Control Systems

VT825 / Environmental Monitoring unit

The unit is used for IT environmental control in data-centers, remote facilities, offices, industrial facilities & remote shelters.

VT825 Environmental Monitoring Unit

دستگاه مانیتورینگ VT825 جهت نظارت و کنترل شرایط محیطی نظیر دما، رطوبت، دود، آتش، نشتی مایعات، ولتاژ، جریان، لرزش، جریان هوا، کنترل دسترسی، دوربینهای تحت شبکه و ارسال هشدارهای مختلف بصورت SMS, SNMP, Email, Video and Alarm در محیط های دیتا سنترها و سایتهای مخابراتی و ... مورد استفاده قرار می گیرد.

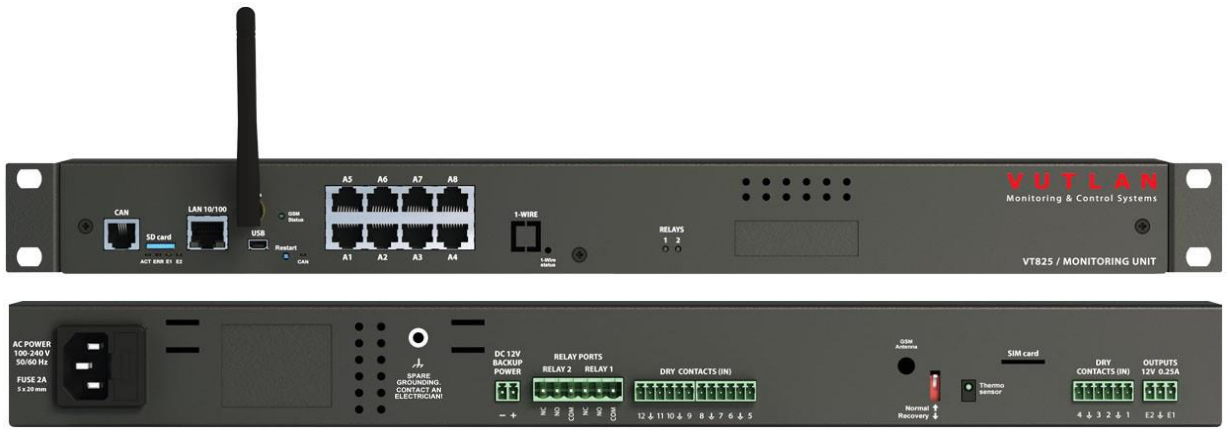


مشخصات سخت افزار:

- CAN port for digital sensors
- 8 Autosense RJ-12 ports for sensors
- 4 dry contact inputs
- USB port for web camera or for USB flash for saving logs
- Two 12V 0.25A output
- 100 Mbit Ethernet port
- External chassis earthling
- LEDs: power, relays, errors, CAN
- Onboard temperature sensor (1%)
- Internal GSM modem extension slot (GSM modem is ordered separately)
- Internal “VT10 / 1-Wire extension” slot or internal “VT18 / Extension slot” (extensions are ordered separately)

مشخصات نرم افزار:

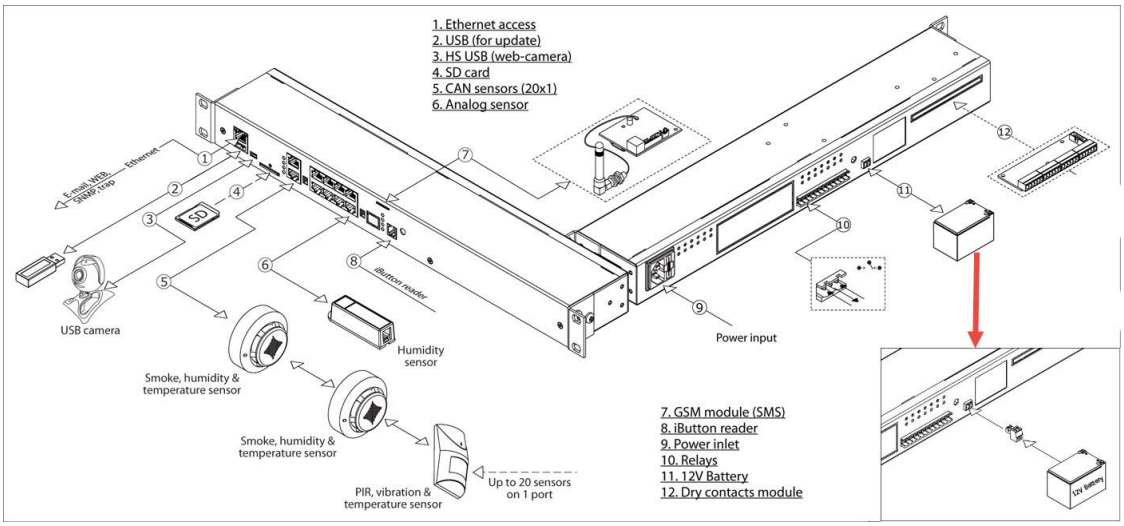
- Web interface
- Virtual sensors & elements:
  Group, E-mail, SNMP trap, SNMP Get, SMS, SMS Gate, Web-to-SMS, IP cams, PINGs, Triggers, Timers, Dew point
- SNMP traps, SMS & E-mail notifications
- Supports SNMP v.1, v.2c, v.3
- Notifications: E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get
- Configurable embedded logic
- Sensor graphing
- FTP Backup, Radius, DynDNS, SNTP, SMTP, Mail Log, USB Flash log, SD Card Log
- Multilanguage support



امکانات:

- ✓ مانیتورینگ شرایط محیطی نظیر دما، رطوبت، دود، آتش، نشتی مایعات، ولتاژ، جریان، لرزش، جریان هوا، کنترل دسترسی و ... تحت شبکه و SNMP

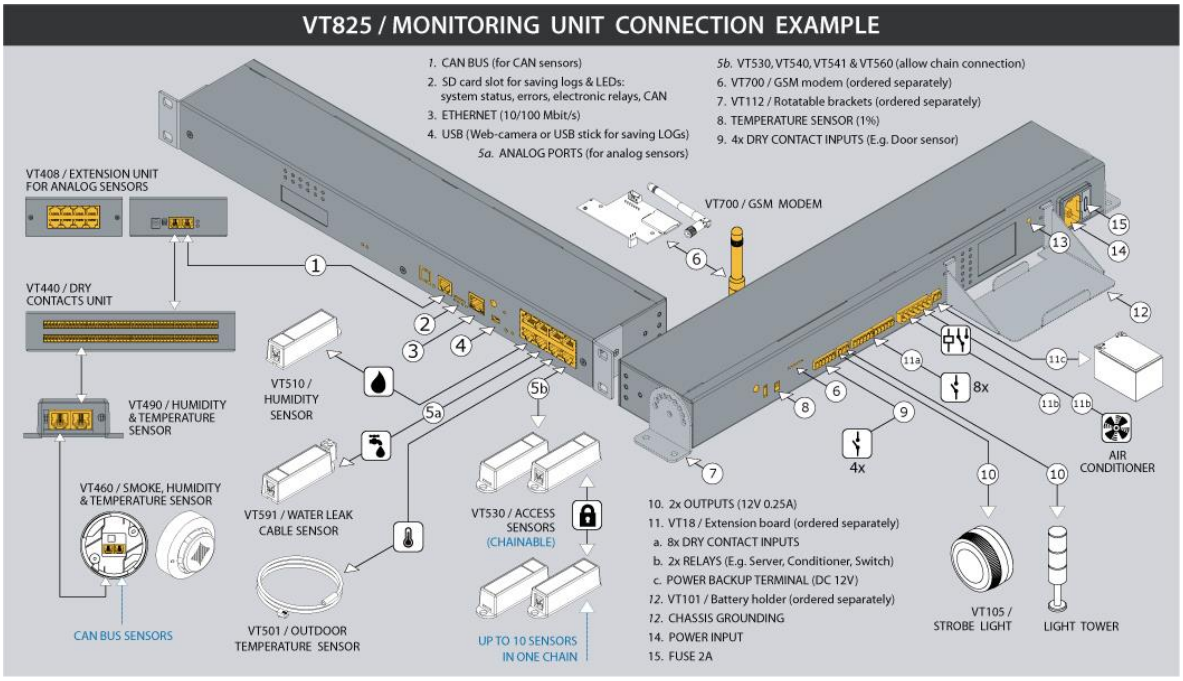
- ✓ مصرف انرژی بسیار پایین در کنترلر مرکزی و سنسورها این امکان را فراهم می سازد تا راه اندازی کل سیستم با باطری امکان پذیر شده و در صورت قطع برق (در صورت نسب باطری) دستگاه بدون هیچ مشکلی به کار خود ادامه دهد.



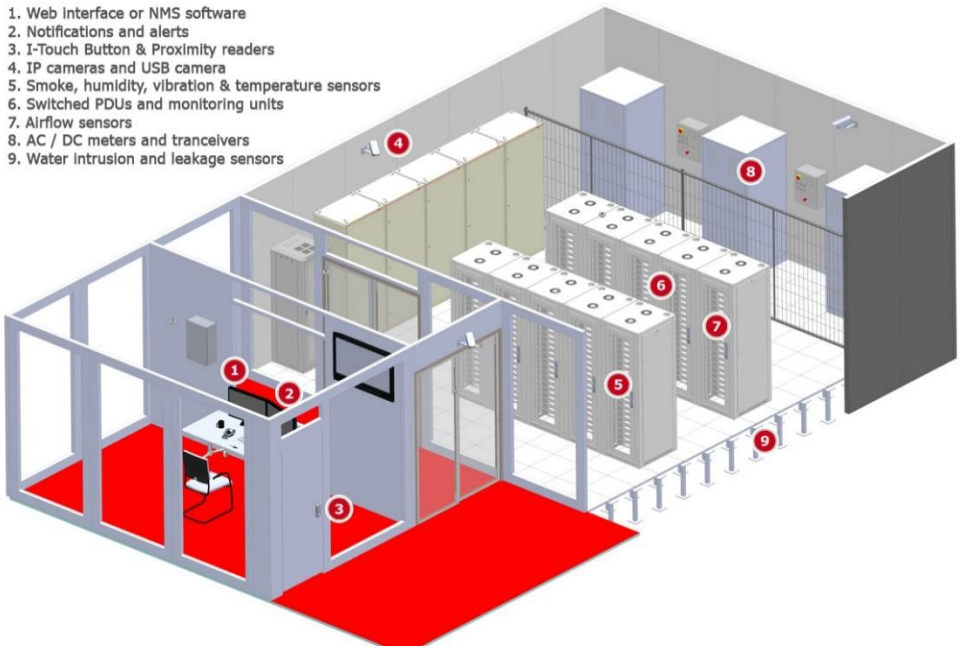
- ✓ استفاده از سیستم عامل لینوکس و سخت افزار قدرتمند به منظور بالابردن دقت، سرعت و امنیت دستگاه این امکان را فراهم می نماید تا به صورت ۲۴ ساعته و ۷ روز هفته کنترلر و سنسورهای متصل به آن بدون مشکل یا خطا به کار خود ادامه دهند.

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,
Storage humidity: 0 to 95 %, non-condensing	

- ✓ امکان ماژولار بودن کنترلر به منظور کاهش قیمت و هزینه های جانبی، بالا بردن سرعت نصب تجهیزات، ارتقا و افزایش تعداد سنسورها، ورودیها و خروجیهای دستگاه بدون نیاز به تغییرات در ساختار سیستم.
- ✓ عملکرد صحیح با سرعت بالا در اندازه گیری پارامترهای محیطی به دلیل طراحی خاص کنترلر مرکزی با ماژول GSM، سنسورها، ورودیها و خروجیهای دستگاه.
- ✓ ابعاد و وزن کم (1U) و کیفیت ساخت بالا با تکنولوژی روز اروپا.
- ✓ کاهش زمان نصب و راه اندازی و هزینه کابل کشی.

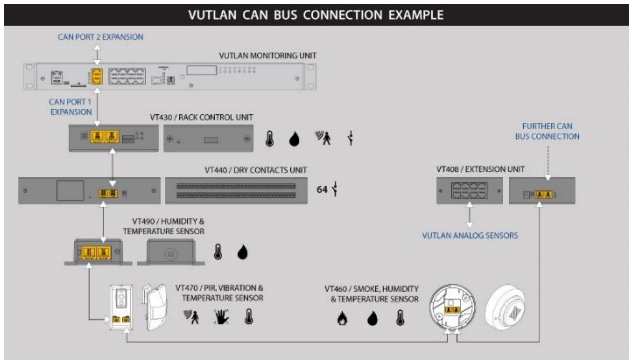


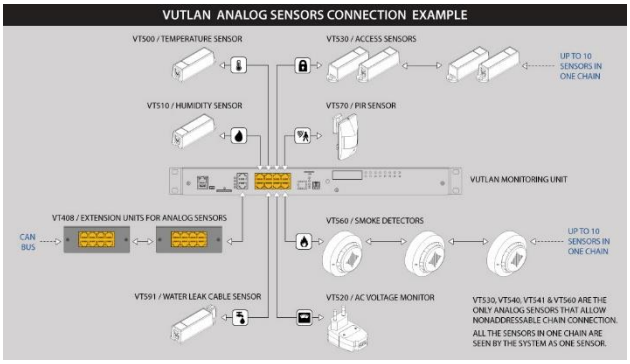
- ✓ طراحی و ساخت اختصاصی شده به منظور نظارت و کنترل شرایط محیطی در محیطهای دیتا سنتر و IT.
- ✓ تضمین عملکرد صحیح دستگاه و سنسورها در داخل میدانهای الکترو مغناطیسی قوی موجود در دیتا سنترها.



VUTLAN
VT825 / Room Guard

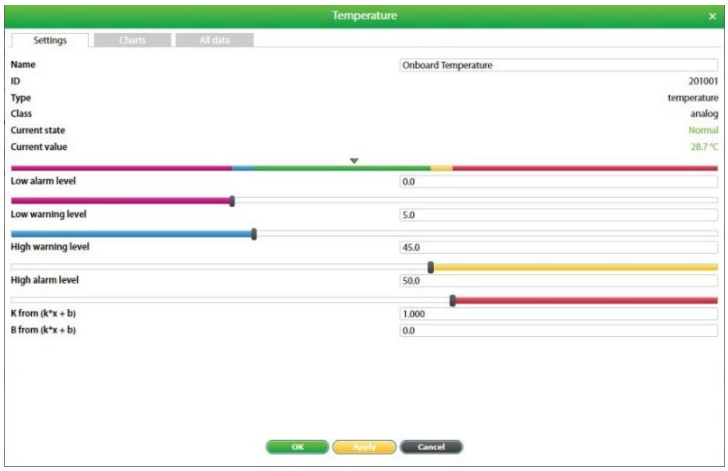
- ✓ پشتیبانی از CAN جهت افزایش تعداد و دقت سنسورها و همچنین استفاده از سنسورهای ترکیبی نظیر "دما و رطوبت و دود".
- ✓ پشتیبانی از سنسورهای دیجیتال دارای میکرو کنترلر داخلی با پروتکل ارتباطی خاص برای افزایش کیفیت، دقت و بالا بردن طول عمر سنسورها.
- ✓ امکان اتصال سنسورها تا فاصله ۳۰۰ متری.





- ✓ مستقل بودن دستگاه و عملکرد آن بدون وابستگی به شبکه، نرم افزار و سخت افزار خاص بصورت کاملا وب بیس (در صورت قطع شبکه دستگاه بدون خطا به کار خود ادامه می دهد).
- ✓ مشاهده لاگهای سیستم، مانیتورینگ سنسورها، تنظیمات، مشاهده دوربینها، نقشه دیتاسنتر و تمامی امکانات ... تحت وب و بصورت تجمیع شده بدون استفاده از نرم افزار.
- ✓ پشتیبانی از پروتکل HTTPS برای رابط کاربری تحت وب دستگاه به منظور افزایش امنیت.
- ✓ پشتیبانی از زبان های مختلف در رابط کاربری تحت وب دستگاه.

- ✓ امکان تعریف ۵ رول مختلف برای هر سنسور بصورت:



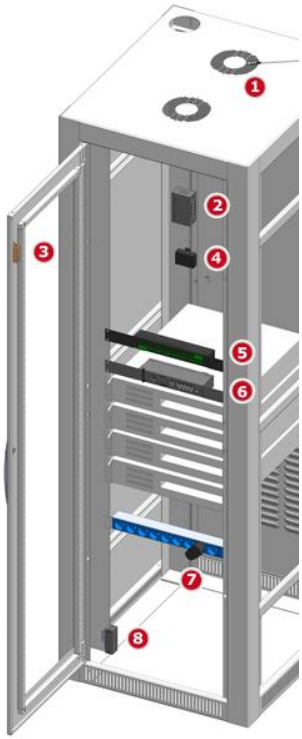
Low alarm level
Low warning level
Normal level
High warning level
High alarm level

- ✓ امکان کالیبره کردن سنسورها در بخش تنظیمات هر سنسور
- ✓ مشاهده تغییرات سنسور بصورت لیست
- ✓ مشاهده تغییرات بصورت نمودار در بازه های زمانی متفاوت
- ✓ دریافت خروجی تغییرات به صورت CSV و XML

- ✓ امکان مشاهده چهار دوربین تحت شبکه (JPEG stream) در رابط کاربری تحت وب دستگاه.

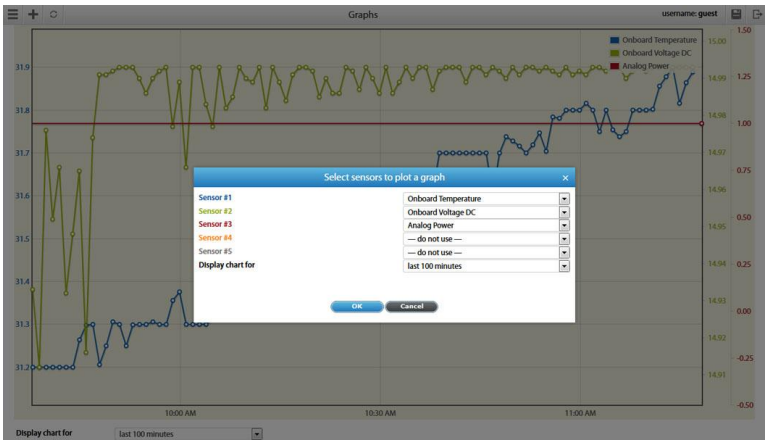
- ✓ امکان راه اندازی آژیر صوتی و نوری در صورت بروز شرایط بحرانی در خارج و داخل دیتا سنتر.
- ✓ امکان اجرای آژیر صوتی به صورت نرم افزاری و تحت وب در شرایط بحرانی.
- ✓ نمایش نوع هشدارها بصورت آیکنهای رنگی

- ✓ امکان نصب کنترلر مرکزی در رک با اشغال فضای تنها یک یونیت.
- ✓ امکان اتصال انواع سنسورها جهت مانیتورینگ و کنترل شرایط هر رک.

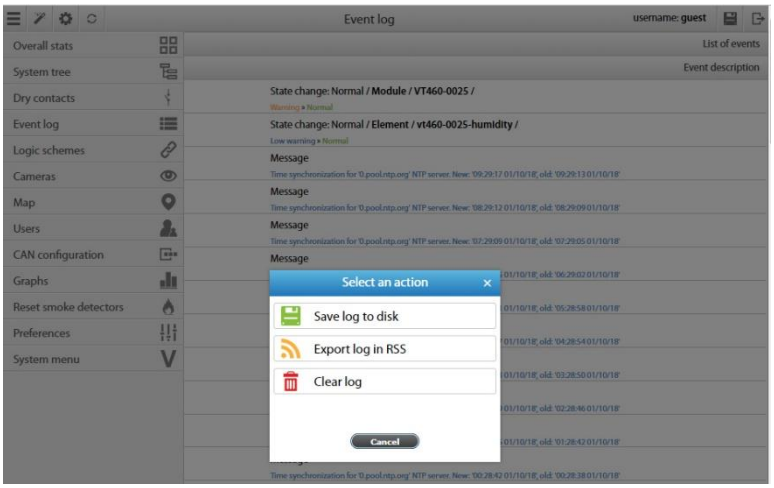


1. Air Flow Sensor (سنسور جریان هوا)
2. Sensor Extension Unit (اکستنشن سنسور جهت افزایش تعداد سنسورها)
3. Vibration Sensor (سنسور ویبره)
4. Humidity & Temperature Sensor (سنسور دما و رطوبت)
5. Dry Contacts Unit (اکستنشن افزایش تعداد ورودیهای دیجیتال)
6. Monitoring Unit with GSM Modem and Dry Contacts (کنترل مرکزی و مودمGSM)
7. AC voltage monitor (سنسور اندازه گیری ولتاژ)
8. Rack control unit (این ماژول امکان کنترل رک نظیر نظارت بر دسترسی درب رک، ۲ ورودی برای اتصال سنسور دربهای جانبی، سنسور دما و رطوبت را دارا می باشد)

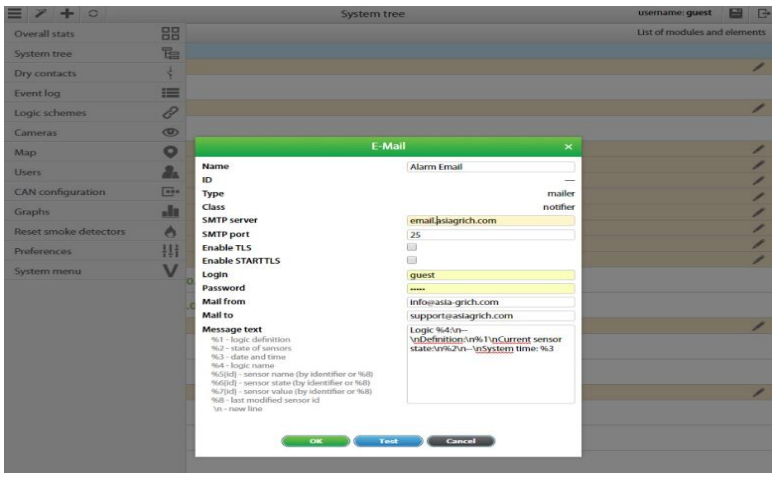
- ✓ نمایش تغییرات سنسورها و ورودیهای دیجیتال به صورت نمودار در بازه زمانی مختلف و با امکان مشاهده بصورت نقطه به نقطه.



- ✓ امکان استخراج و ذخیره لاگهای سیستم بصورت فایل اکسل و RSS.



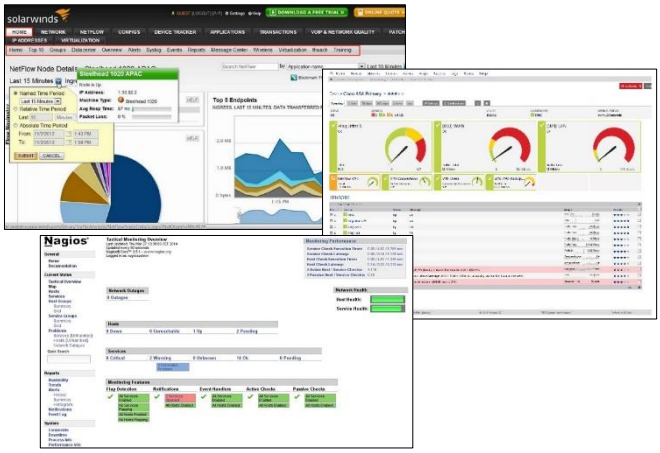
- ✓ ارسال ایمیل هشدار با امکان سفارشی کردن متن ایمیل



- ✓ پشتیبانی از NTP Server جهت همگام کردن ساعت دستگاه با ساعت سایر تجهیزات تحت شبکه
- ✓ امکان نظارت بر Ping دستگاههای مختلف در شبکه و اجرای دستورات مختلف نظیر ارسال پیامک هشدار، راه اندازی مجدد سوئیچها، راه اندازی آژیر فلاشر، ارسال ایمیل، SNMP Trap و ... در صورت قطع شدن Ping دستگاههای مورد نظر.
- ✓ پشتیبانی از Syslog Server جهت مدیریت و انتقال لاگهای سیستم به سرور syslog.
- ✓ پشتیبانی از DynDNS جهت مانیتورینگ تحت اینترنت از تمامی نقاط دنیا و بدون نیاز به IP استاتیک.
- ✓ پشتیبانی از Radius جهت اتصال کاربران مجاز و اهراز هویت توسط سرور مرکزی.
- ✓ پشتیبانی از کارت حافظه و یا USB Flash جهت ذخیره لاگها و اطلاعات سیستم.
- ✓ پشتیبانی از پروتکل FTP به منظور انتقال و ذخیره لاگهای سیستم به صورت دوره ای به سرور FTP .
- ✓ پشتیبانی از SNMP Get جهت ارتباط با دستگاههای دیگر VUTLAN به صورت M2M برای توسعه و افزایش تعداد ورودیها و خروجیهای دستگاه و ارسال دستورات خاص
- ✓ پشتیبانی از SNMP v1/2/3 و SNMP Trap جهت اتصال به نرم افزارهای مانیتورینگ.
- ✓ امکان به روزرسانی سیستم عامل به صورت رایگان و ...

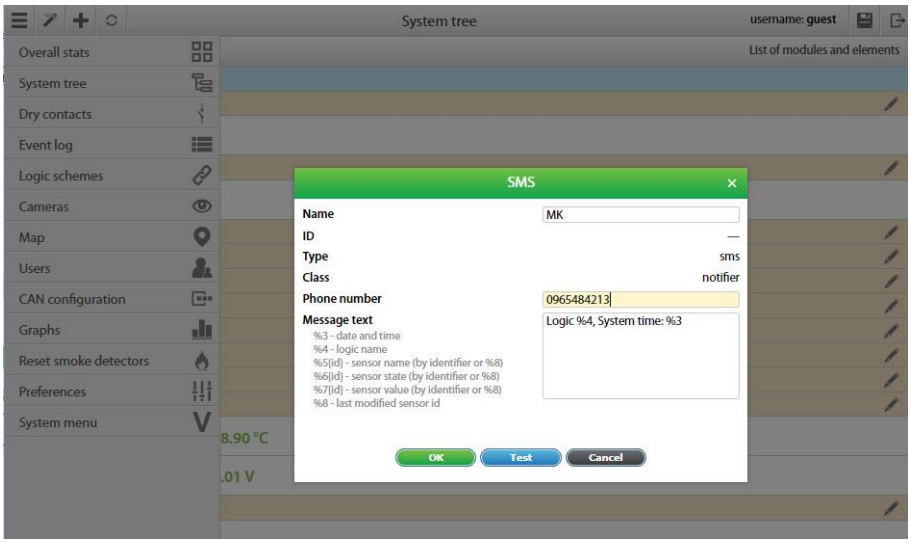
SNMP
Simple Network Management Protocol

- ✓ ZABBIX
- ✓ PRTG NETWORK MONITOR
- ✓ IPSWITCH WhatsUpGold
- ✓ ManageEngine
- ✓ SPICEWORKS
- ✓ ICINGA
- ✓ openNMS®
- ✓ Nagios®

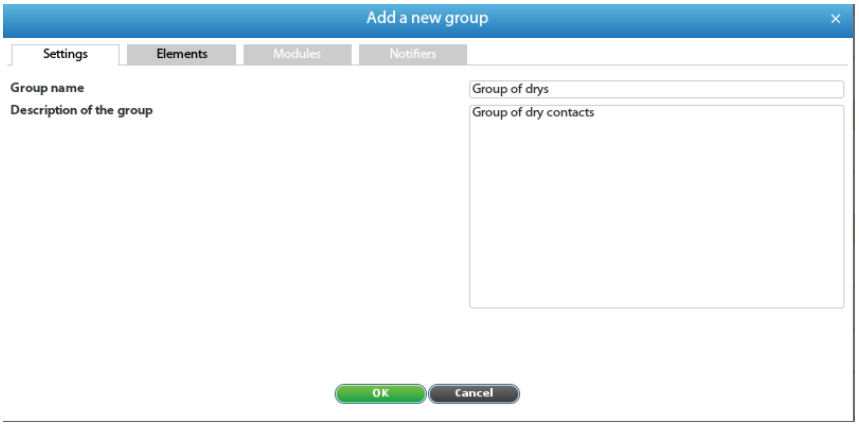


AccelOps	GroundWork Inc.	Monitorix	Observium	PathSolutions	TclMon
AggreGate Network Manager	Ganglia	Munin	OpenKBM	Performance Co-Pilot	Verax NMS
Andrisoft WANGUARD	HP Network Node Manager (NNMi)	Nagios	OpenNMS	PRTG Network Monitor	ManageEngine
Argus	IBM Tivoli Network Manager	NetCrunch	Opmantek NMIS	Scrutinizer	Spiceworks
CA Spectrum	Icinga	Netmon - Network Monitor	OPNET's AppResponse Xpert	ScienceLogic	TclMon
Avaya VPFM	InterMapper	NetQoS Performance Center	Opsview	ServersCheck	Verax NMS
Cacti	IPHost Network Monitor	Network Instruments Observer Infrastructure	op5 Monitor	SevOne	WhatsUpGold
Centina Systems NetOmnia	isyVmon	NetXMS	OSI NetExpert	Shinken	Xymon/Hobbit
collectd	Kaseya Network Monitor	NeuralStar	PacketTrap	Solarwinds	Zabbix
Dhyan Network management System	LiveAction	CA Nimsoft Monitor	Pandora FMS	Spiceworks	Zenoss

- ✓ امکان تعریف تایمر و مدیریت زمان بندی رخدادهای مختلف به عنوان مثال راه اندازی دو کولر گازی هر شش ساعت یکبار به صورت خودکار.
- ✓ ارسال SMS هشدار با امکان سفارشی سازی متن به سه روش زیر:
  - توسط ماژول GSM مودم به صورت لوکال (GSM SMS)
  - توسط دستگاه کنترلر VUTLAN دیگر مجهز به مودم GSM (SMS Gate)
  - توسط سرویسهای ارسال کننده پیامک "SMS Server" (Web-to-SMS)
- ✓ امکان کنترل و مانیتورینگ با ارسال کدهای دستوری SMS به دستگاه.



- ✓ امکان گروه بندی سنسورها ، هشدارها و رخدادها به منظور مدیریت سریع و راحت تر سیستم.

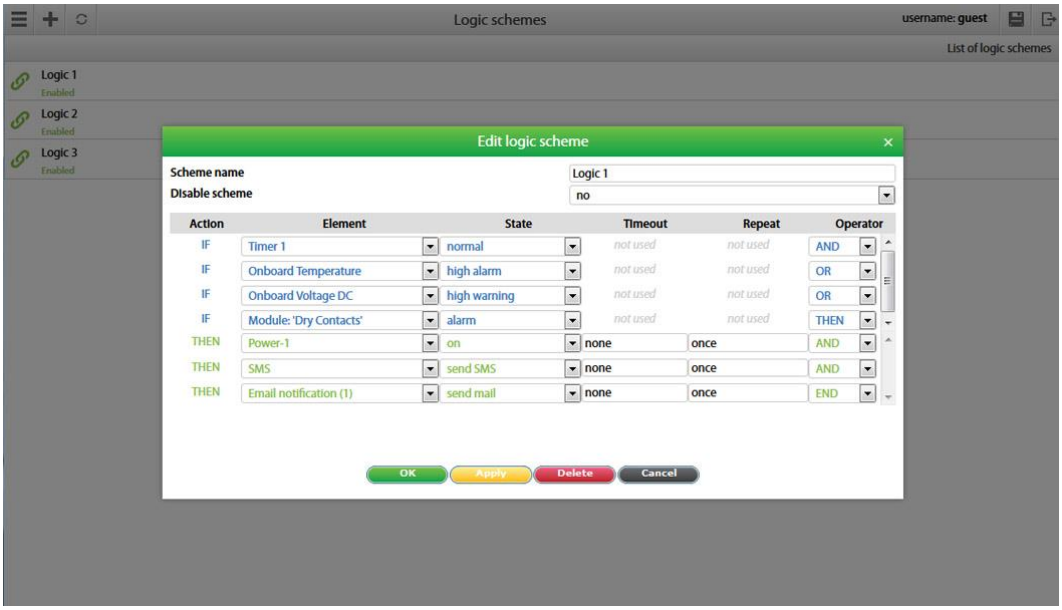


- ✓ امکان مانیتورینگ عملکرد صحیح کنترلر مرکزی توسط سنسورهای داخلی دستگاه نظیر دما، ولتاژ و پاور.
- ✓ امکان اضافه کردن ماژول سیستم کنترل دسترس جهت کنترل ورود و خروج افراد.

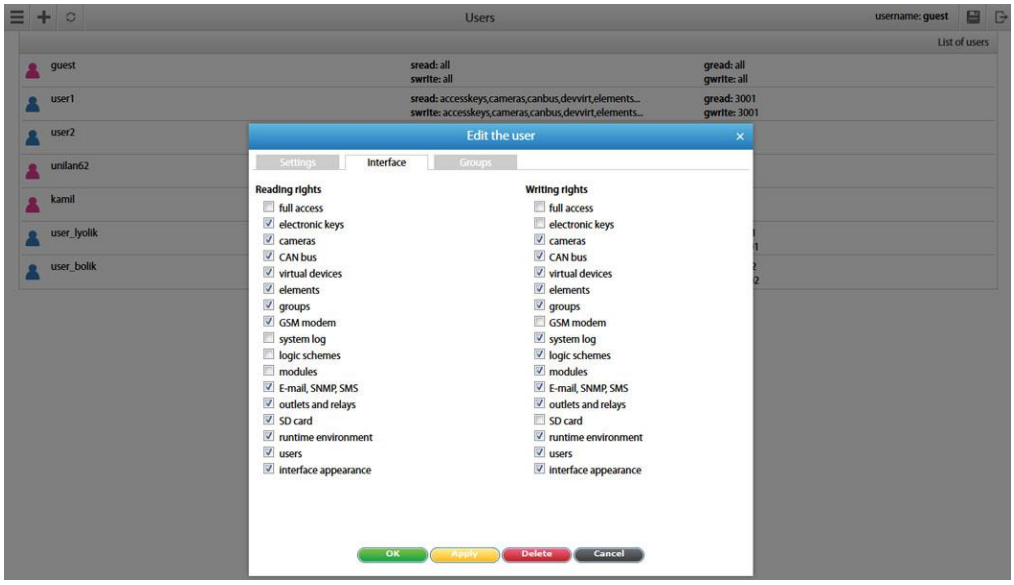
- ✓ امکان افزایش تعداد سنسورها تا ۶۴ عدد با استفاده از ماژول اکستنشن و بدون نیاز به تنظیمات نرم افزاری و سخت افزاری.

- ✓ امکان افزایش تعداد ورودیهای دیجیتال تا ۶۴ عدد با استفاده از اکستنشن و بدون نیاز به تنظیمات نرم افزاری و سخت افزاری.

- ✓ امکان ساخت دستورات و تسکهای منطقی مختلف و پیچیده به منظور مدیریت رخدادها در صورت بروز هشدارها به عنوان مثال ارسال پیامک هشدار، فعال کردن آژیر فلاشر، راه اندازی سیستم اعلام و اطفاع حریق، قطع برق رکها، خاموش کردن سیستم کولینگ، ارسال ایمیل هشدار و ... در صورت بروز آتش سوزی در دیتا سنتر.



- ✓ امکان گروه بندی و اضافه نمودن کاربرهای مختلف با حق دسترسی های گوناگون برای دسترسی به تنظیمات سیستم مانیتورینگ.



مشخصات نرم افزای VT825:

Web interface
- Full monitoring and control over IP
- 3-Tier user access
- Time synchronization
- Day / night cycles
- Seasonal time setup
- Multi language interface
- System & Group trees
- Dashboard and stats
- Dry contacts panel
- Outlets / Relays panel
- Event log panel
- Logic scheme panel
- Access panel
- Graphs panel

Cameras
- IP cameras
- USB camera
- Send JPEG stream on event

SNMP agents
- Supports SNMP v1, v2c, v3
- Infrastructure monitoring program NagiosQL
- Nagios plugins
- Infrastructure monitoring program OpenNMS

Logs
- Logs, sensor data, configuration elements
- FTP, Syslog server export
- Syslog server export
- Export sensor data in XML or CSV format
- Save logs to SD card or disk
- RSS export

Networking
- DynDNS
- RADIUS

Sensors
- 4-level threshold controls
- Plug & Play
- Formulas to adjust sensor values
- Graphs and Multi-graphs
- Sensor data import

Equipment control
- Relay switching
- Outlet switching
- Change state by SMS
- Change impulse by SMS

Virtual sensors
- PING
- Timer
- Logic schemes

Backup
- Logs export
- Daily backup of settings on FTP

Notifications
- E-Mail
- SNMP trap
- SMS notifications
- SNMP get

Access
- User keys
- Access GUI panel

Control by SMS
- Read sensor data
- Set state of relay / outlet
- Set impulse of relay / outlet
- Program to send SMS from PC

Other
- Upgrade via USB, FTP or HTTP
- Clone settings of multiple systems using "Duplicator" software

VUTLAN

VT825 / Room Guard

مشخصات فنی VT825:

Dimensions
W 440mm, H 44.45mm (1U), D 79.4 mm
19" Rack mount (1U)
Weight 1.2 Kg

Power Requirements
90-240V, IEC C14, Fuse 2A

Mounting
19" rack mount (1U) Desktop (self-adhesive rubber foot ins-luded) Accessory VT112 (rotatable brackets for wall mount)

Power Consumption
12 Watt

Status indicators
LEDs: CAN, Power, Relays and Error

Inputs
CAN open port
4 dry contact inputs
8 RJ-12 sensor ports
Ethernet 10/100 Mbit/s

Network Interface
Ethernet 10/100 Mbit/s

Status Indicators
LED indication for Power / Network con-nectivity
LED indication for CAN bus connection
Error LED
Relay LEDs

Outputs
2 * 12V 0.25A relay outputs
GSM SMA

Accessories
VT101 / Battery holder
VT112 / Rotatable mounting brackets

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

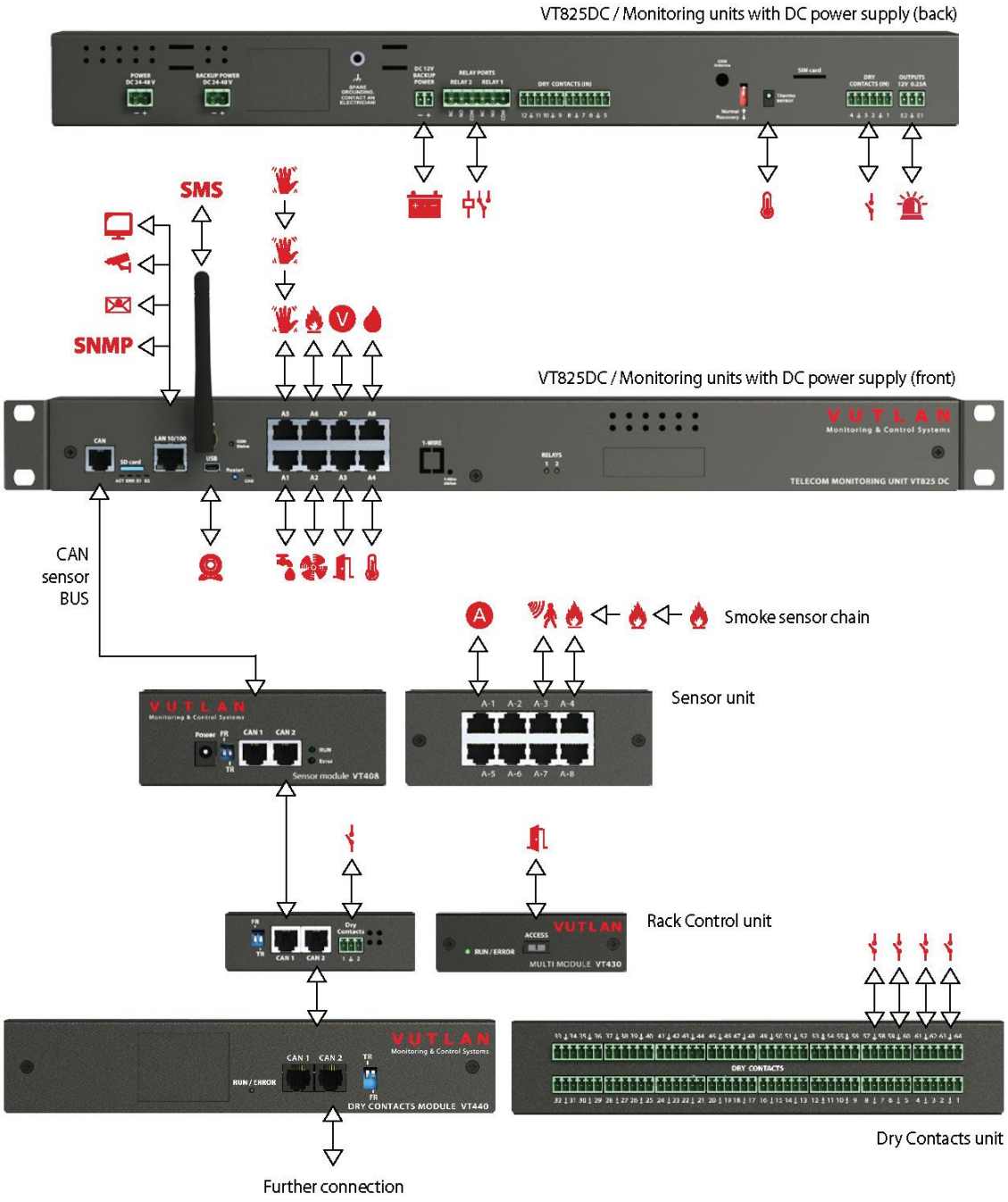
Expansion Devices
VT700 / GSM modem
VT10 / 1-Wire board (adds 1-Wire bus for 1-Wire sensors) or VT18 / Extension board (adds 2 relays, 8 dry contact inputs & power backup terminal)

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

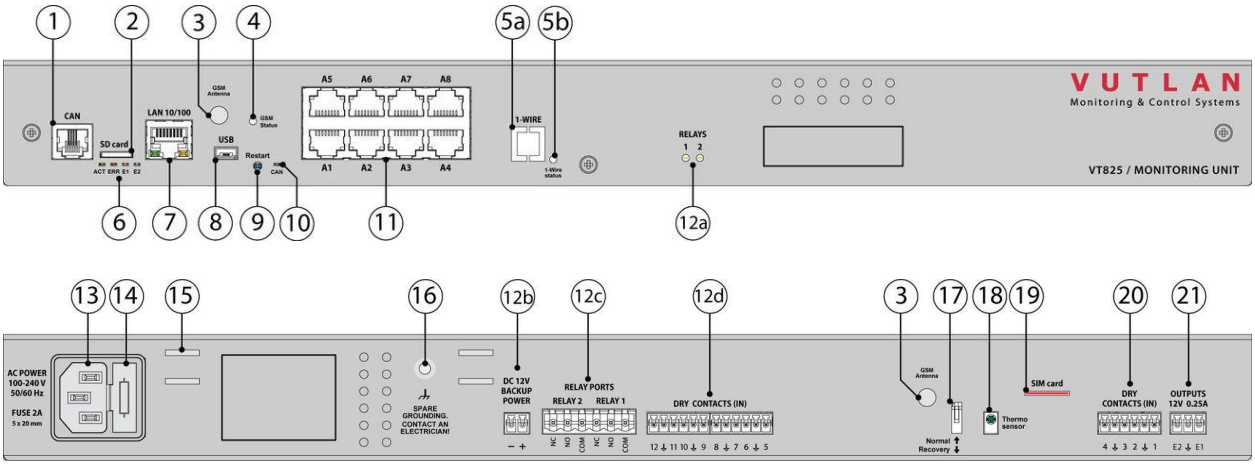
Sensors
Temperature sensor (1%)
Power supply voltage sensor (1%)

Components
Manufactured in EU.

Example connection diagram



VT825 / Monitoring unit



1. "**CAN**" - digital connector RJ12 for the connection of CAN sensors and CAN extensions on a CAN bus, with auto-sensing.
2. "**SD**" - SD, Micro SD card connector with ejector, needed to store data.
3. "**GSM ANTENNA**" - connector, used when GSM modem is installed inside of the appliance to connect GSM antenna. (GSM modem is ordered separately)
4. "**GSM Status**" - indicates GSM SIM card status. Blinking = working.

5a. "**1-WIRE**" - Used when "VT10 / 1-Wire module" (extension board ordered separately) is installed inside. Serial communication protocol that uses a single data line plus ground reference between master (VT825/ Monitoring unit) and 1-Wire slave device.

5b. "**1-WIRE STATUS**" - If the green light is "ON", then 1-Wire module is on. There's an element inside monitoring unit's interface that can be switched "ON" and "OFF", which activates 1-Wire bus.

6. LEDs: "**ACT**" - indicates appliance status, "**E1**" - indicates 12V E1 relay status, "**E2**" - indicates 12V E2 relay status, "**ERROR**»" - indicates error and traffic.

• Blinking "ACT" ..... • Blinking "E1" ..... • Blinking "E2"..... • Blinking "ERROR»" .....

7. "**LAN**" - Ethernet 10/100 Base-T port, provides Ethernet connection.

• LEDs - "yellow" (status) and "green" (traffic) shows the network traffic. The status LED: flashes green when system starts up, shows the connection state (constant green light - the connection is established, blinking green - the connection attempt).

8. "**USB**" - type mini AB USB-port 2.0, required to connect a USB camera or to restore an appliance.
9. "**RESTART**" or "**RESET**" - restarts the appliance.
10. LED: **"CAN"** - indicates CAN bus status.

"**CAN**" blinks slowly - nothing is connected

"**CAN**" blinks fast - configuration is in process

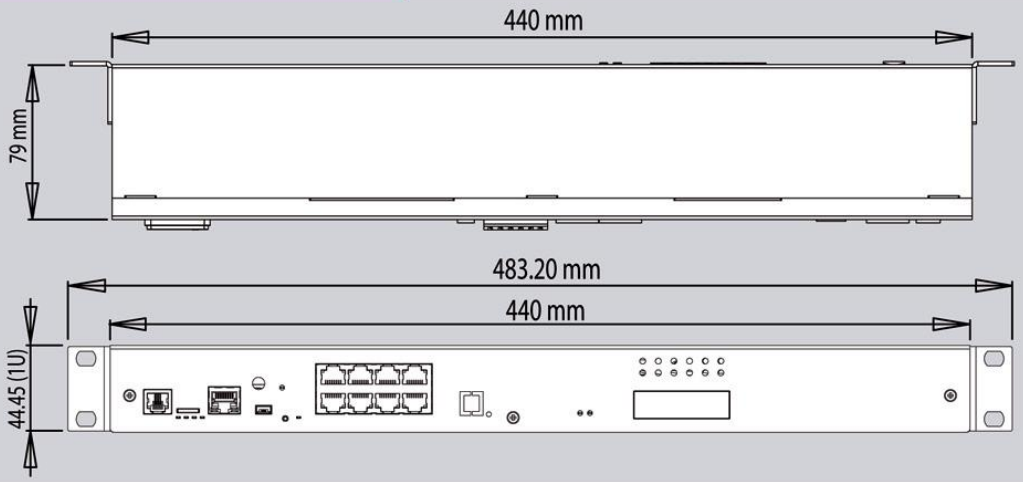
"**CAN**" glows constantly - connected to CAN devices

11. "**A1**...**A8**" - 8 RJ12 analog sensor inputs with auto-sensing.
12. "VT18 / Extension board" - (ordered separately) consists of:
    6a. LEDs: **"Relays 1, 2"** - indicates power relays status.
    6b. **"DC 12V"** - power backup terminal.
    6c. **"Relays 1, 2"** - relays power terminals.
    6d. "**DRY CONTACTS 5...12**" - Dry contacts terminal (type IN)
13. **"Power input"** - 230V 2A C14 input.
14. **"Fuse"** - 2A 5*20 mm fuse.
15. "VT101 / Battery holder" - ordered separately.
16. "⏚" - External chassis grounding, M4 thread.
17. "**Dip switch**" Normal ↑ Off - the system should be always switched to this mode.

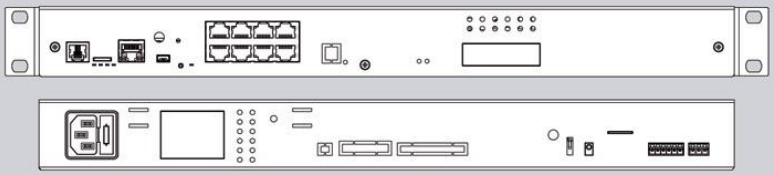
Recovery ↓ On - use this option only in case you need to recover manufacturing settings.

18. "**TEMPERATURE SENSOR**" - accuracy +/- 1 °C.
19. **"SIM"** - connector with an ejector, used when modem is installed inside of the appliance.
20. "**DRY CONTACTS 1...4**" - Dry contacts terminal (type IN)
21. **"OUTPUT 12V 0.25A"** - 12V 0.25A output electronic relay terminal

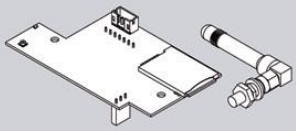
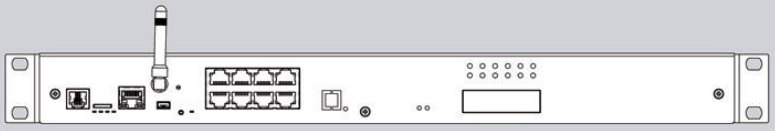
Dimensions (VT825)



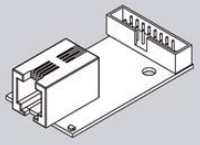
Extensions order options (ordered separately)



VT825 / Monitoring Unit

\+  = 

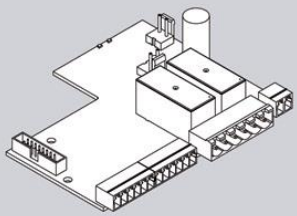
VT700 /GSM modem

\+  = 

VT10 / 1-Wire board

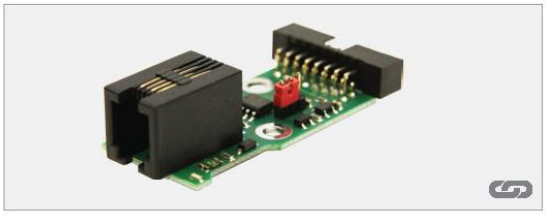
or

VT10 & VT18 can not be installed at the same time

\+  = 

VT18 / Extension board

Extension units



Dimensions	44 x 23 x 15 mm
Weight	50 g
Inputs	1-Wire
Operating temperature	Min. -10 °C, Max. 80 °C

VT10 / 1-Wire board

Board is mounted and connected inside of VT325, VT335, VT805, VT825, VT825 DC monitoring units. Allows to communicate with 1-Wire readers or sensors.

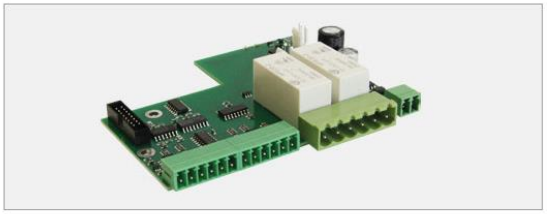
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Network Interface	1-Wire
Status Indicators	1-Wire status LED
Max. distance	100 m
Package includes	2 screws M3x5, Cable BH2-16M to BH2-16M

Dimensions	60 x 50 x 15 mm
Weight	50 g
Outputs	SMA GSM
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT700 / GSM modem

Can be built in VT3xx, VT8xx monitoring units and switched PDUs. Needed when LAN is absent for sending SMS and voice messages. Power-cycling is included.

Outputs	SMA GSM
Mounting	Mounted inside monitoring unit using x3 screws M3*5
Status Indicators	Red / Green Led
Special Features	GSM - 850 / 900 / 1800 / 1900 MHz, Antenna - SMA / U.fl, processor - SIM900D.
Package includes	Screws, Cable BH2-16M to BH2-16M



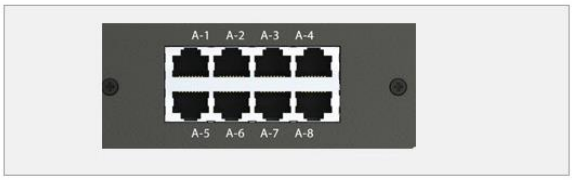
Dimensions	83 x 96 x 26 mm
Weight	56 g
Inputs	x8 dry contacts inputs, 12V power backup

VT18 / Extension board

Board is mounted and connected inside of VT825 monitoring unit. Adds x8 dry contacts inputs, x2 loads (latching relays with LEDs indicators) & 12V DC power backup terminal.

Power input	12V DC, 1A (2P, 3,81mm)
Outputs	Latching relays
Mounting	Embedded inside monitoring unit
Status indicators	Relays status LEDs
Package includes	4 screws M3*8, Cable BH2-16M to BH2-16M, Terminal plugs, Power cable

CAN sensors & devices



VT408 / Extension unit

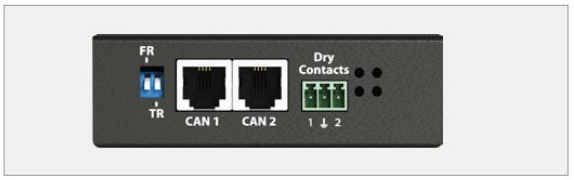
Allows to increase the quantity of sensors connected to any Vutlan monitoring unit. Adds up to 8 analog sensors.

Connects on CAN port and allows further CAN chain connection.

Sensors connected to the extension unit appear in the system automatically.

Dimensions	110 x 40 x 68 mm
Weight	500 g
Inputs	x2 RJ-12 CAN ports x8 6P6C ports for analog sensors
Operating temperature	Min. -10° C, Max.80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Power input	12V DC, 1A
Network Interface	CAN open
Mounting	Desktop, Wall mount
Status Indicators	LEDs: Power, Network, CAN
Max. BUS length	225 m
Max. length of analog sensor cables	50-150 m, depends on the sensor type
Package includes	2 screws M3x5, Cable BH2-16M to BH2-16M



VT430 / Rack control unit

The module has all possibilities for rack control, PIR sensor for rack door control, 2 contacts for side walls and back door control, temperature and humidity sensors. Connects on CAN port and allows further CAN chain connection.

Sensors and contacts appear in the system automatically.

Dimensions	110 x 40 x 68 mm
Weight	500 g
Inputs	x2 6P6C CAN ports, x2 dry contact inputs
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	12V DC, 1A
Network Interface	CAN open

Mounting	Desktop, Wall mount
Power consumption	1 Watt
Status Indicators	LEDs: Power, Network, CAN
Max. distance	225 m.
Built-in humidity sensor	Range: 0-95% RH Accuracy: 3% RH
Built-in temperature sensor	Temperature: -10 … +125 °C, Accuracy: ± 0.4°C
PIR sensor	Distance: min. 1 cm., max. 3-4 cm.
Package includes	Control unit, screws, nuts, cable 2m, self-adhesive rubber foot, terminal plug 3P 3.5mm, mounting bracket, sticker

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VT825 / Room Guard

Dimensions	215 x 40 x 40 mm
Weight	0.5 kg
Inputs	x32 or x64 dry contacts inputs, x2 6P6C CAN ports
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT440 / Dry contacts unit

Allows to increase the number of dry contacts connected to any Vutlan monitoring unit. Adds 32 dry contacts. Can be connected to any CAN port. Max. distance from the monitoring unit is 300 meters. Maximum 128 dry contacts may be connected to 1 monitoring system.

The number of dry contacts inside VT440 can be increased up to 64 with dry contacts extension module VT32 (ordered separately).

Network Interface	CAN open
Mounting	Wall mount, Desktop, 19" rack mountable
Expansions	VT32 / Dry contacts board (ordered separately)
Power Consumption	1 Watt
Status Indicators	Red / Green Led
Max. distance	225 m
Package includes	Unit, cable 2m, 19" mounting angles, self-adhesive rubber foot, Terminal plug 6P 3.5mm 6pcs

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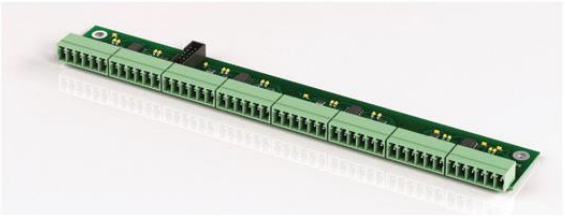

Inputs	x32 dry contacts inputs
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT32 / Dry contacts board

Can be embedded inside VT440 (Dry Contacts extension unit). It has 32 dry contacts. Used to increase the number of dry contacts in VT440 from 32 to 64. Ordered separately from VT440.

Mounting	Mounted inside monitoring unit using x3 screws M3*5
Package includes	Extension board, Cable BH2-10M to BH2-10M, Terminal plug 6P 3.5mm 8pcs, Screws M3 5mm 3pcs,

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VT825 / Room Guard

Inputs	2 x RJ-12
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min. -10° C, Max.80°C
Network Interface	CAN open
Power Consumption	1 Watt
Max. distance	225 m
Smoke sensitivity	0,05 — 0,2 db/m

VT460 / Smoke, humidity & temperature sensor

At installation indoors, inside the rack etc., sensor monitors occurrence of smoke, temperature and humidity inside the building.

Automatic restoration of power after the actuation.

Response time	10 seconds
Status Indicators	Red / Green Led
Dimensions	Ø100 × 45 mm
Weight	310 g
Mounting	Wall mount
Special features	Measured Humidity - 0.. 95% RH, Accuracy • 3%,
Temperature sensor	Measured range: -10 … +125 °C, Accuracy: ± 0.4°C
Package includes	Mounting bracket included

Inputs	2 x RJ-12
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min. -10° C, Max.80°C
Network Interface	CAN open
Extension protocol	CAN open

VT470 / PIR, vibration & temperature sensor

Sensor is needed for control of movement over an infra-red range and measurement of temperature and vibration indoors.

Power Consumption	1 Watt
Max. distance from unit	225 m
Status Indicators	Red / Green Led
Dimensions	105 × 57 x 40 mm
Weight	133 g
Mounting	Wall mount
PIR sensor	Range: 12 m, Viewed angle: 110°
Temperature sensor	Measured range: -20 ... 60 °C, Accuracy: 1°C.
Package includes	Mounting bracket included

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VT825 / Room Guard

Inputs	2 x RJ-12
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min. -40° C, Max.105°C
Network Interface	CAN open
Extension protocol	CAN open

VT490 / Humidity & temperature sensor

At installation indoors, inside the rack etc., sensor monitors temperature and humidity inside the building.

Power input	12V DC, 1A
Power Consumption	1 Watt
Max. distance from unit	225 m
Status Indicators	Red / Green Led
Dimensions	68 × 47 x 26 mm
Weight	160 g
Mounting	Screws included
Humidity sensor	Measured Humidity - 0.. 95% RH, Accuracy: 3% RH
Temperature sensor	Measured range: –10 ... +125 °C, Accuracy: ± 0.4°C

Analog sensors

Dimensions	60×18×18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -50° C, Max.105°C

VT500 / Temperature sensor

Sensor is needed for measurement of temperature indoors.

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Mounting bracket included
Power Consumption	60 mW
Max. distance	100 m
Accuracy	1 °C
Package includes	Sensor, Cable 2m, x1 screw M5, Sticker, Mounting bracket

Dimensions	Ø7 × 30 mm, PVC cable 15 m
Weight	340 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -50° C, Max.105°C

VT501 / Outdoor temperature sensor

Sensor is needed for measurement of temperature outdoors.

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Clamps included
Power Consumption	60 mW
Max. distance from unit	100 m
Special features	Accuracy: 1 °C
Package includes	Sensor & clamps

Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Accuracy	3% RH
Operating temperature	Min. -10 °C, Max. 80 °C

VT510 / Humidity sensor

Sensor is needed for measurement of relative humidity 10-95% indoors with relative accuracy 5%.

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Mounting bracket included
Power Consumption	60 mW
Max. distance from unit	50 m
Special features	Accuracy 3% RH
Package includes	Sensor, Cable 2m, x1 screw M5, Sticker, Mounting bracket

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VT825 / Room Guard

Dimensions	63 × 66 × 40 mm
Weight	125 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. +80 °C

VT520 / AC voltage monitor

Sensor is needed for measurement of AC 110-240V.

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	90-240V, IEC C14
Mounting	Insert in the socket
Power Consumption	60 mW
Max. distance from unit	100 m
Special features	Voltage measured: 90 .. 250 V, Accuracy: 2 %.
Package includes	Sensor & Cable RJ11 to USB (1.8m)

Dimensions	60 × 18 × 18 mm
Weight	106 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT530 / Access sensor

At installation on doors, windows, etc., sensor controls status of door, window: opened, closed. Chain connection is possible.

A magnet is mounted on a door & the sensor is mounted on a jamb of a door. At opening a door contact is disconnected, and system of monitoring receives notification on opening.

Mounting	Mounting bracket included
Power Consumption	60 mW
Max. distance from unit	150 m
Special features	Daisy chain connection
Package includes	Sensor, Magnet, Cable 2m, Screws, Washers, Nuts, Stickers, Mounting bracket

Dimensions	60×18×18 mm
Weight	106 g
Inputs	RJ9
Operating temperature	Min. -10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT531 / Optical access sensor

At installation on doors, windows, etc., sensor controls status of door, window: opened, closed.

Outputs	RJ11 / RJ12 (6p4c)
Mounting	Mounting bracket included
Power Consumption	60 mW
Max. distance from unit	150 m
Built-in sensors	Optical sensor: Min. view distance 1 cm Max. view distance 3-4 cm
Package includes	Sensor converter, optical sensor, mounting bracket, cable, screws, nuts, bolts & a sticker.

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VT825 / Room Guard

VT540 / Vibration sensor

At installation on walls, windows, etc., sensor controls vibration.

At impact or attempts of jolting or drilling of the surface on which the sensor is established, contacts of the sensor respond and the system receives message.

Chain connection is possible.

Dimensions	60×18×18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Mounting	Mounting bracket included
Power Consumption	60 mW
Max. distance from unit	150 m
Special features	Daisy chain is possible
Package includes	Sensor, Cable 2m, x1 screw M5, Sticker, Mounting bracket

VT560 / Smoke detector

Detector detects smoke indoors. Daisy chain is possible: possible to connect up to 10 sensors of the same type in a chain. In such case the system shows all sensors as a single element.

Dimensions	Ø100×45 mm
Weight	290 g
Inputs	x2 RJ-12
Operating temperature	Min. -10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Mounting	Mounting bracket included
Power Consumption	100 mW
Status indicators	Error LED
Max. distance from unit	150 m
Special features	Daisy chain is possible Sensitivity 0,05 — 0,2 db/m
Package includes	Sensor, cable 2m, screws, nuts bolts, mounting bracket

VT570 / PIR sensor

Sensor is needed for control of movement over an infra-red range.

Dimensions	105 × 57 x 40 mm
Weight	133 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. +80 °C

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Mounting kit included
Power Consumption	100 mW
Status indicators	Error LED
Max. distance from unit	50 m
Special features	IR detection angle: 110°, Max. IR detection distance: 12 m Cable length: 2m

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VT825 / Room Guard

Dimensions	60 × 18 × 18 mm
Weight	125 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT590 / Leak sensor

When water is in contact with the metal cores, the sensor indicates the emergence of moisture. If sensor is constantly responding to high water levels, replace the sensor with a level sensor.

Attention! Metal cores are detectors of water, mount strictly downwards as close as its possible to a floor.

Mounting	Mounting bracket included
Power Consumption	60 mW
Max. distance from unit	100 m
Special features	Response time: 1 s, Recovery time: 1 s. Cable length: 2 m.
Package includes	Sensor, screws, nuts bolts, mounting bracket

Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Mounting bracket included

VT591 / Water rope sensor

When water is in contact with detection cable sensor indicates the emergence of moisture. Water detection cable length: 50 m.

If sensor is constantly responding to high water levels, replace it with a level sensor.

Water detection cable VT-WDC is supplied separately.

Power Consumption	60 mW
Max. distance from unit	100 m
Special features	Response time: 15 s, Recovery time: depends on how fast the cable becomes dry
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, terminal plug 2pins 5mm

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Dimensions	Ø3 mm, length - 6, 10, 17, 25, 50 m.
Weight	15 g/m
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -50 °C, Max. +105 °C

WDC / Water detection rope

When water is in contact with detection rope, sensor indicates the emergence of moisture. Water detection cable length: 6m, 10m, 25m, 50 m. If sensor is constantly responding to high water levels, replace it with a level sensor. **VT591 is ordered separately!**

Order cable like WDC 50, WDC 25, WDC 10 or WDC 6.

Max. distance from unit	225 m
Response time	15 s
Detectable liquids	Clean, dirty, distilled water, acids, alkalies, Conductors - Ni/Cu.
Conductor	27% Ni

AC / DC meters

Dimensions	68 × 47 x 26 mm
Weight	160 g
Inputs	RJ-12 / RJ-11

VT406 / DC HOS sensor transducer

is used together with HOS-100Q1 DC hall current sensors and converting data into format of IP monitoring system. The system interface allows you to assign the current meter and to introduce the function data conversion.

DC current sensor HOS-100Q1 is ordered separately.

Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Has plastic brackets for wall mount
Power Consumption	100 mW
Max. distance from unit	50 m
Special features	Measured voltage: -4 ... +4V, Accuracy: 1%
Package includes	Transducer, cable 2m, 12V adapter, 4 pin terminal plug, screws, nuts, bolts, stickers

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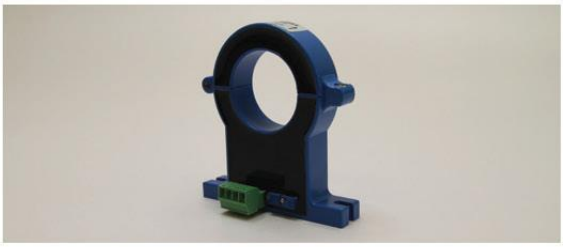


Dimensions	60 × 61 × 16 mm
Weight	150 g
Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	-12V / +12V
Outputs	4 pin terminal

HOS-100Q1 / DC current sensor

100A hall sensor is used for measurement of DC current. The system interface allows you to assign sensor and to introduce the function data conversion.

Max. distance from the measuring unit is 50 meters.

Mounting	Has two holes for wall mount
Power Consumption	1 Watt
Max. distance from unit	50 m
Special features	Frequency: 0-20 kHz, Isolation: 5kV, Nominal AC current: 100A, Measured range: 0 - 150 A, Structure: Open / Closed Accuracy: 1%, Output: -4 ... +4 V, 4 wire Window: ø21 mm Response time: < 1µs
Package includes	Sensor, 4 pin terminal plug

VUTLAN

VT825 / Room Guard

Dimensions	68 × 47 x 26 mm
Weight	160 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. +80 °C

VT407 / AC HAT sensor transducer

Transducer is used together with HAT-100Q1 current transducer and transferring data into a monitoring system. The system interface allows you to assign the current meter and to introduce the function data conversion.

DC current sensor HAT-100Q1 is ordered separately.

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	12V
Mounting	Has plastic brackets for wall mount
Power Consumption	50 mW
Max. distance from unit	50 m
Special features	Measured voltage: 0 .. +5V
Package includes	Transducer, cable 2m, 12V adapter, 4 pin terminal plug, screws, nuts, bolts, stickers

+

Dimensions	60 × 61 × 16 mm
Weight	150 g
Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	-12V / +12V
Outputs	0-5 V, 4 wire

HAT-100Q1 / AC current transducer

100A transducer is used for measurement of AC current. The system interface allows you to assign transducer and to introduce the function data conversion.

Max. distance from the measuring unit is 100 meters.

Mounting	Has two holes for wall mount
Power Consumption	1 Watt
Max. distance from unit	50 m
Special features	Isolation: 2,5 kV, Nominal AC current: 100A, Measured range: 0 ... 120A, Accuracy: 1%, Structure: Open / Closed Response time: -12 V / +12V Supply voltage: < 350 ms Window: ø21 mm Frequency: 50 (400) Hz
Package includes	Sensor, 4 pin terminal plug

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. The system interface allows you to assign the sensor and to introduce the function data conversion.

Only 6P6C RJ12 cable can be used with sensor!

Dimensions	60 × 18 × 18 mm
Weight	100 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	12V

Mounting	Mounting bracket included
Power Consumption	100 mW
Max. distance from unit	50 m
Special features	Isolation: 1 kV, Measured voltage: 0 ... 60 V, Accuracy:1%
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, terminal plug 2 pins 5mm

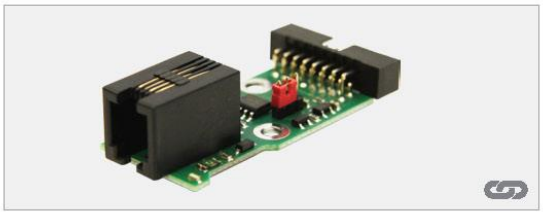
VT420 / Converter 4-20mA

Converter of current loop 4-20mA is used for measurement of constant current on 4-20mA from different 3rd party sensors and converting data into format of Vutlan monitoring system. The system interface allows you to assign the sensor and to introduce the function data conversion.

Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Mounting	Mounting bracket included
Power Consumption	100 mW
Max. distance from unit	50 m
Special features	Isolation: 1 kV, Measured current: 4 ... 20 mA, Accuracy: 2%
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, terminal plug 2 pins 5mm

1-Wire sensors



VT10 / 1-Wire board

Board is mounted and connected inside of VT325, VT335, VT805, VT825, VT825 DC monitoring units. Allows to communicate with 1-Wire readers or sensors.

Dimensions	44 x 23 x 15 mm
Weight	50 g
Inputs	1-Wire
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Network Interface	1-Wire
Status Indicators	1-Wire status LED
Max. distance	100 m
Package includes	2 screws M3x5, Cable BH2-16M to BH2-16M

VT581 / Temperature sensor

Sensor is needed for measurement of temperature indoors.

Chain connection is possible.

Dimensions	60×18×18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Mounting bracket included
Power consumption	60 mW
Max. distance	150 m
Special features	Daisy chain connection possible.
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, sticker

VT583 / Outdoor temperature sensor

Sensor is needed for measurement of temperature outdoors.

Dimensions	Ø7×30 mm, PVC cable 15 m
Weight	340 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -50 °C, Max. 105 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Clamps included
Power consumption	60 mW
Max. distance	100 m
Special features	Cable 2m
Package includes	Sensor, clamps

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VT825 / Room Guard

Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

VT585 / Thermocouple converter

Converter is designed to measure the temperature of various thermocouples 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.

Mounting	Mounting bracket included
Power Consumption	
Max. distance from unit	50 m
Special features	
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, terminal plug 2 pins 5mm

Accessories

Dimensions	70 x 36 x 56 mm, cable 3m
Weight	150 g
Power input	12V DC, 1A

VT103 / Alarm beacon

Can be used with VT8xxx monitoring master units.
Needed for light and sound alarms.

Mounting	Wall mount
Special features	Rated voltage: 12V; Current: alarm 250 mA; Sound pressure: 108 dB; Tone frequency: 3.8 kHz; Flash frequency: 2.5Hz red 150/ min; Power consumption: 250 mA; Cable: 3m;
Package includes	Device, clamps, screws

CGA103 / Backup battery 11,1V

At installation on units VT825, VT825 DC provides power supply.

Dimensions	52 × 101 × 15 mm
Weight	133 g
Operating temperature	Min. 0 °C, Max. +45 °C
Special features	Li-Ion, 1850 mAh, Voltage - 11.1 V.

KMS-30 / Access sensor

Access sensor, magnet.

USB100 / USB camera

720P HD ATM Mini USB Camera 2.0&1.1 UVC

Weight	125 g
Inputs	HS USB
Mounting	Wall mount

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VT825 / Room Guard

Dimensions	82 x 82 x 22 mm
Weight	106 g
Operating temperature	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Network interface	1-Wire

VT107 / Proximity reader

Can be used with VT8xxx monitoring master units.

Mounting	Wall mount
Power consumption	1 Watt
Status indicators	Red / Green LED
Max. distance ???	15cm
Special features	Frequency: 125 kHz, Power consumption: 30 ... 55 mA, Range response: 15cm, Card: unique, Frequency: 125 kHz,
Package includes	Device,

+

VT108 / RFID card

Can be used with VT8xxx monitoring master units.

Dimensions	86 x 59 x 1 mm
Weight	7 g
Operating temperature	Min. -10 °C, Max. +80 °C
Special features	Memory: 64 bit, Standard: EM4100, Frequency: 125 kHz,