## VUTLAN Monitoring & Control Systems



- **Environmental Monitoring Systems**
- Power Distribution Units
- Digital, Analog & Wireless Sensors
- AC / DC Meters

#### For:

- Data centers
- Telecoms
- IT SOHO

## **Company Profile**

Vutlan s.r.o. is leading European manufacturer of environmental monitoring systems, sensors and other monitoring equipment for server rooms, with headquarters in Bratislava, Slovak republic.

Vutlan environmental monitoring products enable to actively monitor the conditions in the rack, server room, data center, or anywhere else where it is needed to protect critical assets.

Conditions monitored include extreme temperatures, humidity, power spikes and surges, water leaks, smoke, and other. We provide proper environmental monitoring and control, which alerts and acts to any conditions that could have an adverse effect on your mission critical equipment.

We produce wireless sensors and devices, monitoring units, PDUs with monitoring core for large data centers, server rooms, web hosting facilities, 19" cabinets and telecom facilities. Our target segments are data centers, telecommunication companies and IT SOHO. Our products can be divided into three segments: Personal, Business and Corporate. We serve our customers around the world through a distributor network in 36 companies around 38 countries.

About Us	02
Embedded Web Interface	06
Environmental Options Chart	08
Monitoring Units	10
Power Distribution Units	18
Units & PDUs Comparison Tables	20
Extension Units	22
CAN Sensors & Devices	24
Analog Sensors	28
AC / DC Meters	32
Wireless Sensors	36
1-Wire Sensors	38
Accessories	40
Monitoring Software	42
Solutions	44

The manufacturer reserves the right to change product specifications without prior notice. We can not guarantee the accuracy of all data. Specified information does not relieve the customer from independent application tests. The up-to-date information on the company's products is displayed at www.vutlan.com.

# **Excellent Product Selections**

At VUTLAN S.R.O. we are committed to providing our customers with the highest performance and most reliable products. Our customers rely on us to deliver quality products that go above and beyond expected performance. From design and development, to manufacturing and support, we are on a journey of continuous improvement, challenging ourselves to always strive for new levels of performance.



#### **Company values**

#### **✓** Quality First

Our commitment to delivering a high quality product drives everything we do. All employees at Vutlan strive toward flawless execution. We are committed to providing the highest degree of quality in every product, solution, service, and endeavor of our company. We achieve this by continuous improvement of our products and processes and developing a clear understanding of our customer's requirements.

#### ✓ Customer satisfaction

Customer service excellence is central to all processes at Vutlan. We do this by keeping a constant pulse on our own performance, providing quality products and innovative solutions, integrating customer feedback to continually improve our services resulting in value to the customer and the company.

#### ✓ Our People

At Vutlan, people are our most valuable asset. Our employees embody our core values and bring unmatched industry experience, talent and drive to each customer engagement. We employ highly motivated individuals who thrive in our complex and constantly evolving industry. All employees are encouraged to demonstrate leadership in their roles, whether they contribute to a team or lead large parts of the organization.

#### ✓ Partners as essential team members

We owe our suppliers and distributors the same type of respect that we show to our customers. Our suppliers and distributors deserve fair and equitable treatment, clear agreements and honest feedback on performance. We consider our suppliers' needs in conducting all aspects of our business.

#### **✓** Lifetime Support

When You choose systems and solutions from Vutlan, You get guaranteed access to the expertise needed to keep things running safely, smoothly and efficiently throughout their lifetime. All of the documentation regarding installation and use of old and new product is kept on-line along with the drivers and other accompanying tools. We also provide additional extended warranties for the products to insure that in case of a break such products can be repaired and sent back to You.

#### ✓ Passion for our Work

We are passionate about our business. We show pride in our brand and heritage. We delight our consumers and serve our customers through the high quality of our products and services. We promote a positive, energizing, optimistic and fun environment. We promote and implement creative and innovative ideas and solutions. We value, promote and fiercely protect our reputation. We aim high and think Big

## ✓ Cost efficiency without sacrificing quality

We never sacrifice quality! But customers require cheaper products and tools. To achieve this we strive for simplicity. We aim at what customers demand most, learn from our competitors, acquire best components for reasonable prices and price our products reasonably.





#### **Configurable Logic Schemes**

Logic schemes are used to specify automatic actions to events that occur in the system. Conditions "IF" are combined using "AND" & "OR" and executed using "THEN".











#### **Virtual Sensors & Elements**

9 virtual elements: Group, E-mail (message), SNMP trap, SMS, Timer, Trigger, PING, SNMP Get, IP Cam.



#### Sensor graphing

Detailed graphs and data tables for one or more sensors using multi-plot graph. Each graph shows data for last 100: seconds, minutes, hours,



#### Up to 4 IP cameras

Every monitoring unit can display pictures from a maximum of four IP cameras simultaneously in several sizes, up to 640x480 pixels resolu-



#### Map

9 virtual elements: Group, E-mail (message), SNMP trap, SMS, Timer, Trigger, PING, SNMP Get, IP Cam.



#### Outlet management

Interface has a separate panel for managing the status of latching relays/outlets. Three level access allows to restrict access to an appropriate group of outlets.



#### Multi Language Support

Our web interface is available in English, Russian, German, French, Italian, Spanish, Czech, Polish, Korean & etc.. If you require another language, it is easy to make a translation.



#### **Notifications & Alerts**

7 notification technologies: Send Email, SMS, Syslog, Event log, SNMP Trap, SNMP Get, sound alert and lights. Alerts based on thresholds, multiple conditions, escalation alerts, dependencies, alert scheduling.



#### **User Access & Permissions**

Using "view" and "write" rights, user access can be restricted to the subsystems of the device using groups of access permission. User access can also be restricted to a specific group .of sensors.



#### First run wizard

Interface has a "first run wizard" which allows to configure language, time, network, SNMP and



#### Dry Contacts panel

Interface has a separate panel for managing dry contacts. It also allows to create the logic for an arbitrary group of contacts.

	Date and New	Event description
0	2001/2012 Liquidité	State-dungs from connected - Clamate / exist district functing if
0	Jernation sequence	State-Surge Non-connected - Charact / 40000 States compression /
0	Jennan or supreme	State-Charge Nat connected "Stateset / 4905-600% day (r)
0	2007-07-21 tuguestee	State charge Not connected "Beneat," exist-6604 day 67
0	2017-07-21 THQ-MEPM	State Change (Not connected "Blamate") and \$4.000 door!
0	2017-07-21 t-Q-407M	State change Net connected: Modular (MNO-0004)
0	2017-07-21 140/00/96	Manage State of the Control of the C
0	2017/07/21 12/02/2019	Strong State Control of Control o
0	2010/07/21 1140/07/80	Steep publicated by Longor William Set 1962 81007 AC 1962 81007 Steep
•	20.003.000.000	low
•	30.003.00.0000	Service approximate to the beingst 10° person.  Service approximate to the beingst 10° person.
0	30.005.HERM	Side (harpe Normal / Demont) +660-6016 day 16.7
0	2018/2146/8/M	Sub-things Norted (Bened) width 60% day (S.)
0	NOW SANDOWN	Sub-during Normal (Sement) 4840 MNs day 19./
0	360-06-21-100-06-00	Sun-harp Nortal (Benet) with Mile day (L)
0	2010-01-100-00-00	Sub-Surge Norted (Benedit 1490) 8514 day 12.7
0	201-00-21 NO.00-00	Sun-harge Named (Benedit width MNs day 11.)
0	2010 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sun-harp Nortal (Benefit WHI) MNs day No.
0	300-00-21-900-00M	Sub-dung-Norted (Beset) wild MNs day 61
0	2018/2140/BM	Sub-dung-Norted (Behalf) width 60% day 67
•	WORKSHIP	The same state of the same sta

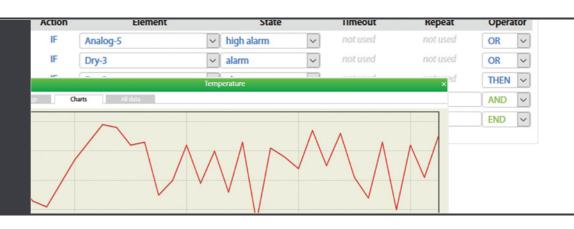
#### **Event Log**

Logic schemes are used to specify automatic actions to events that occur in the system. Conditions "IF" are combined using "AND" & "OR" and executed using "THEN".

## **Vutlan Environmental Monitoring**

## **Options**

At Vutlan S.R.O. we are committed to providing our customers with the highest performance and most reliable products.



VT440-0016		✓ ✓ 28 ✓ <u>11</u>
vt440-0016-dry-1	Normal	vt440-0016-dry-2
vt440-0016-dry-3	Normal	vt440-0016-dry-4
vt440-0016-dry-5	Normal	vt440-0016-dry-6
vt440-0016-dry-7	Normal	vt440-0016-dry-8
vt440-0016-dry-9	Normal	vt440-0016-dry-10
vt440-0016-dry-11	Normal	vt440-0016-dry-12
vt440-0016-dry-13	Normal	vt440-0016-dry-14
1		1

		Temper- ature	Humid- ity	Water Leakage	Airflow	Access	Water Level	AC/DC	Smoke & Fire	Cameras	Sound	Light	Dry contacts IN	Dry contacts OUT	Power Relay	Outputs 12V	Outlets	PING	Vibra- tion	Motion	Con- verter
				***		1	3		<b>&amp;</b>	4	4))	<u> </u>	4	+	朴	12V	•••	1111 •			11
:t-s	VT11 / Dry contact out													•							
Ď	VT18 / Extension board												•		•						
	VT500 / Temperature sensor	•																			
	VT501 / Outdoor temperature sensor	•																			
	VT510 / Humidity sensor		•																		ı
	VT520 / AC voltage monitor							•													
ors	VT530 / Access sensor					•															
sens	VT531 / Optical access sensor					•															
alog	VT540 / Vibration sensor																		•		
An	VT560 / Smoke detector								•												
	VT570 / PIR sensor																			•	
	VT590 / Leak sensor			•																	
	VT591 / Cable leak sensor																				•
	WDC / Water detection rope			•																	
(h·	VT730 / Wireless dual sensor	•	•																		
	VT430 / Rack control unit	•	•										•							•	
Sors	VT440 / Dry contacts unit												•								
/ ser	VT32 / Dry contacts board												•								
8	VT460 / Smoke, humidity & temp. s.	•	•						•												
)igita	VT470 / PIR, vibration & temp. ss	•																	•	•	
ا	VT490 / Humidity & temp. sensor	•	•																		
,,	VT103 / Alarm beacon										•	•									
sorie	VT107 / RFID card reader					•															
ccess	USB100 / USB camera									•											
∢	KMS-30 / Access sensor, magnet					•															
şıs	HOS-100Q1 / DC current sensor							•													
mete	HAT-100Q1 / AC current sensor							•													
Ä	VT410 / DC voltage monitor							•													
AC.	VT420 / Converter 4-20mA																				•
$\neg$	VT581 / Temperature sensor	•																			
Wire	VT583 / Outdoor temperature s-r	•																			
-	VT585 / Thermocouple converter	•																			•



## **Room Guard**

VT325

The unit is used for temperature, humidity, voltage, leakage, smoke, airflow, doors control in small facilities. It has built-in temperature sensor, can connect up to 12 sensors and 2 dry contacts, 2 alarm beacons, 1-Wire board, USB modem or USB-cam.

There are built-in servers and agents like HTTP, HTTPS, SNMP v1, 2c, 3, SMTP, Radius, Syslog, FTP, DHCP, Watchdog.

#### **Connectable Sensors**

- Analog sensors
- 1-Wire sensors
- AC / DC meters

#### Virtual sensors and elements

 Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers

#### **Notifications**

 E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get

#### **Device management**

Web, SNMP, manually via SMS (using external USB modem)

#### **Network protocols**

- DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS
- RADIUS access with Login
- Supports SNMP v.1, v.2c, v.3

#### Alert types

 FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem)

#### Web interface

- Sensor graphing
- Multi language support
- User Access and Permissions
- Configurable embedded logic
- IP cameras view panel
- Event log

#### **Built-in functions**

- Built-in clock time synchronization
- Built-in watchdog timer

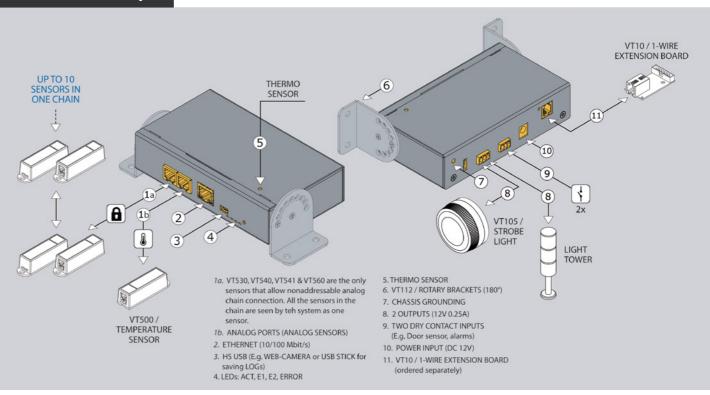
#### **Support & Origin**

- 1 Year warranty (extended possible)
- Manufactured in E.U.

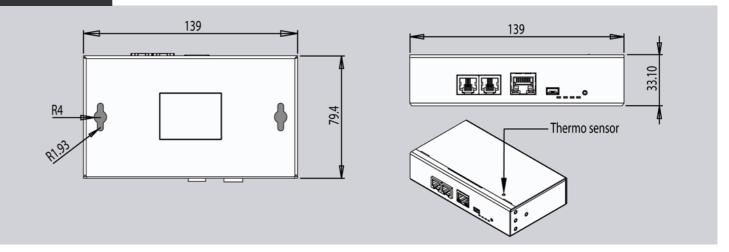
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x2 AutoSense RJ-12 ports x2 dry contact inputs
Outputs	x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays & Error
Network interface	Ethernet 10-100 Mbit/s
Other connectors	USB (for camera, modem or Flash)
Power requirements	DC 12V, 1A

Power consumption	3-10 Watt, 0.12 A
Operating temperature	Min10° C, Max. +80° C
Operating humidity	Humidity: Min. 5%, Max. 80% (Non-Condensing)
Mounting	Desktop, Wall mounting using VT112 brackets(ordered separately)
Expansion devices	VT10 / 1-Wire Board (ordered separately)
Weight	0.5 kg
Other	External enclosure earthing

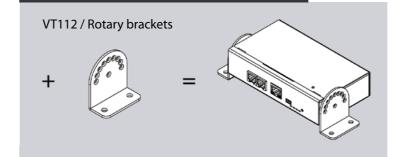
#### **Connection example**



#### **Dimensions**



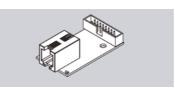
#### **Accessories (ordered separately)**



#### 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

#### **Extension order options (ordered separately)**



Extension	Info
VT10 / 1-Wire board	Allows to communicate with 1-Wire readers or sensors.



## **Room Guard**

VT335+

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.

#### **Connectable Sensors**

- Analog sensors
- 1-Wire sensors
- CAN digital sensors
- AC / DC meters

#### Virtual sensors and elements

 Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers

#### **Notifications**

 E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get

#### **Device management**

Web, SNMP, manually via SMS (using external USB modem)

#### **Network protocols**

- DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS
- RADIUS access with Login
- Supports SNMP v.1, v.2c, v.3

#### Alert types

 FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem)

#### Web interface

- Sensor graphing
- Multi language support
- User Access and Permissions
- Configurable embedded logic
- IP cameras view panel
- Event log

#### **Built-in functions**

- Built-in clock time synchronization
- Built-in watchdog timer

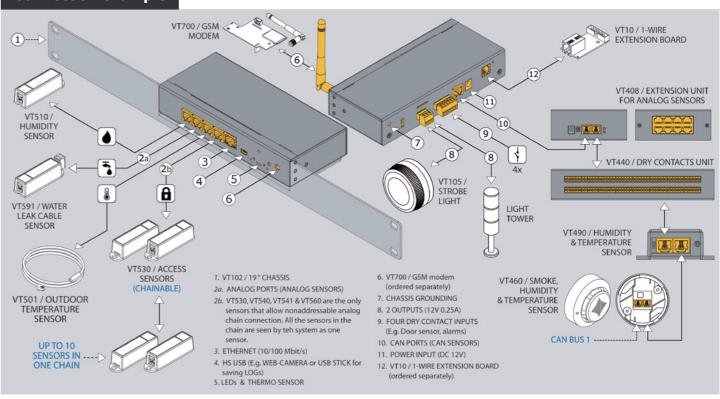
#### **Support & Origin**

- 2 Years warranty (extended possible)
- Manufactured in E.U.

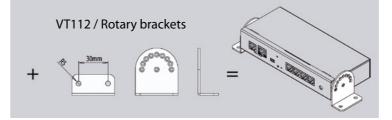
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x4 AutoSense RJ-12 ports x4 dry contact inputs
Outputs	x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays & Error, CAN
Network interface	Ethernet 10-100 Mbit/s
Built-in sensors	Embedded temperature sensor
Other connectors	USB (for camera, modem or Flash)

Power requirements	DC 12V, 1A
Power consumption	3-10 Watt, 0.12 A
Operating temperature	Min10° C, Max. +80° C
Operating humidity	Humidity: Min. 5%, Max. 80% (Non-Condensing)
Mounting	Desktop, 19" mounting Wall mount (VT112 extension)
Weight	1.2 kg
Other	External enclosure earthing
Dimensions	157 x 79 x 33 mm

#### Connection example



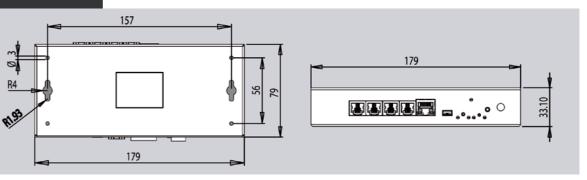
#### Accessories (ordered separately)



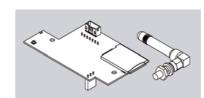
#### Package includes

- · 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
- 19" bracket

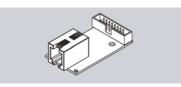
#### **Dimensions**



#### **Extension order options (ordered separately)**



Extension	Info
VT700 / GSM modem	Needed when LAN is absent for sending SMS and voice messages.



Extension	Info
VT10 / 1-Wire board	Allows to communicate with 1-Wire readers or sensors.



The unit is used for environmental control in different facilities. Can connect up to 30 sensors, 4 dry contacts, two 12V alarm beacons, GSM modem, USB camera, four IP cameras, SD card for logs, 1-Wire board with 1-Wire sensors. Has a built-in web interface & supports protocols like HTTP, HTTPS, SNMP v1, 2c, 3, SMTP, Radius, Syslog and other.

#### **Connectable Sensors**

- Analog sensors
- CAN sensors
- AC / DC meters
- 1-Wire sensors

#### **Network protocols**

- DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TI S
- RADIUS access with Login
- Supports SNMP v.1, v.2c, v.3

#### **Support & Origin**

- 2 Year warranty (extended possible)
- Manufactured in E.U.

#### **Device management**

Web, SNMP, manually via SMS (using external USB modem)

#### Notifications

 E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get

#### Alert types

 FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem)

#### **Built-in functions**

- Built-in clock time synchronization
- Built-in watchdog timer

#### Web interface

- Outlet management panel
- · Sensor graphing
- Multi language support
- User Access and Permissions
- · Configurable embedded logic
- IP cameras view panel
- Event log

#### Extensions

• GSM modem (VT700)

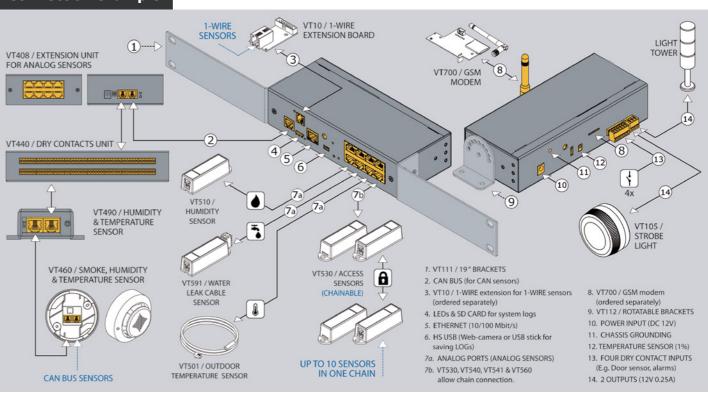
#### Virtual sensors and elements

 Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers

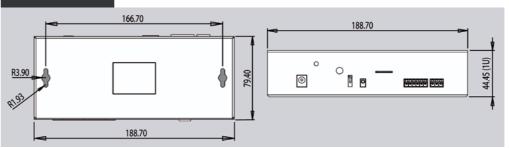
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x8 AutoSense RJ-12 ports x4 dry contact inputs CAN open port for CAN sensors
Outputs	x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays, Error, CAN
Network interface	Ethernet 10-100 Mbit/s
Built-in sensors	Temperature sensor (1%) Power supply voltage sensor (1%)
Other	External enclosure earthing

Other connectors	USB (for camera, modem or Flash) SD slot for saving logs			
Power requirements	DC 12V, 1A			
Power consumption	10 Watt			
Operating temperature	Min10° C, Max. +80° C			
Operating humidity	Humidity: Min. 5%, Max. 80% (Non-Condensing)			
Mounting	Desktop (rubber feet included), 19" mounting, Wall mount Rotating brackets (VT112 extension)			
Weight	1.3 kg			
Dimensions	188 x 44 x 79 mm			

#### **Connection example**



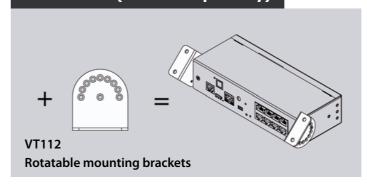
#### **Dimensions**



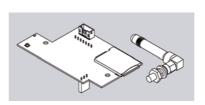
#### **Package includes**

- 12 V adapter
- RJ-45 1 meter patch cable
- x4 Rubber foot
- Quick guide
- Terminal plug 6 pins, 3.5 mm - 1 pcs
- 3.81 mm 1 pcs
- Warranty card
- 19" mounting brackets

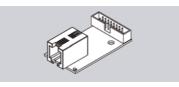
#### Accessories (ordered separately)



#### **Extension order options (ordered separately)**



Extension	Info
VT700 / GSM modem	Needed when LAN is absent for sending SMS and voice messages.



Extension	Info
VT10 / 1-Wire board	Allows to communicate with 1-Wire readers or sensors.

# Monitoring Unit VT825+ CAI UNITED SO CAIR UNITED SO CAIR UNITED STATE S



The unit is used in data centers, remote & industrial facilities, offices. Can connect up to 30 sensors, 12 dry contacts, two 12V alarm beacons, GSM modem, USB-cam, SD card, 1-Wire board (instead of VT18) for reader connection. There are built-in servers and agents like HTTP, HTTPS, SNMP v1, 2c, 3, SMTP, Radius, Syslog, FTP, DHCP, Watchdog.

#### **Connectable Sensors**

- Analog sensors
- CAN sensors
- 1-Wire sensors
- AC / DC meters

#### Virtual sensors and elements

 Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers

#### **Notifications**

 E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get

#### **Device management**

Web, SNMP, manually via SMS (using external USB modem)

#### **Network protocols**

- DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS
- RADIUS access with Login
- Supports SNMP v.1, v.2c, v.3

#### Web interface

- Sensor graphing
- Multi language support
- User Access and Permissions
- Configurable embedded logic

#### Alert types

FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem)

#### **Built-in functions**

- Built-in clock time synchronization
- Built-in watchdog timer

#### Extensions

- GSM modem (VT700)
- Extension board (VT10)

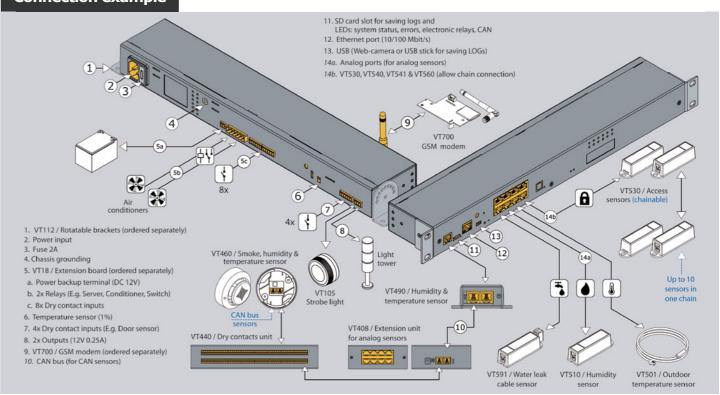
#### Support & Origin

- 2 Year warranty (extended possible)
- Manufactured in E.U.

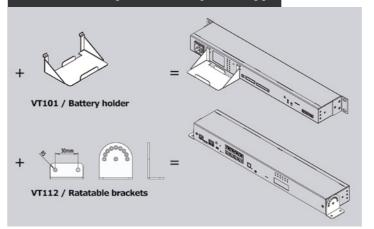
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
Memory	ROM: 512 Mbit NAND Flash, RAM 64 Mb
Inputs	CAN open port for digital sensors x8 AutoSense RJ-12 ports x12 dry contact inputs
Outputs	x2 12V 0.25A outputs x2 loads (latching relays with LEDs indicators)
LED status indicators	Power, Network, Relays & Error, CAN
Network interface	Ethernet 10-100 Mbit/s
Built-in sensors	Temperature sensor (1%) Power supply voltage sensor (1%)
Other connectors	USB (for camera, modem or Flash)

Power requirements	90-240V, IEC C14, Fuse 2A			
Power consumption	12 Watt, 2 A Min10° C, Max. +80° C Humidity: Min. 5%, Max. 80% (Non-Condensing)			
Operating temperature				
Operating humidity				
Dimensions	440 x 44.45 x 79.4 mm			
Mounting	19" Rack mount (1U), Desktop (Rubber foot included) Wall mounting using VT112			
Expansion devices	VT10 / 1-Wire Board (ordered separately)			
Weight	1.5 kg			
Other	External enclosure earthing, 12V DC power backup terminal			

#### **Connection example**



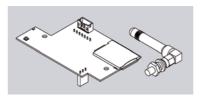
#### Accessories (ordered separately)



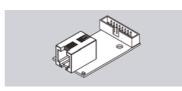
#### **Package includes**

- 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

#### **Extension order options (ordered separately)**



Extension	Info
VT700 / GSM modem	Needed when LAN is absent for sending SMS and voice messages.



Extension	Info
VT10 / 1-Wire board	Allows to communicate with 1-Wire readers or sensors. (Installed instead of VT18)



Device is used for load management and allows to switch on/off or reboot up to 4 outlets. It has built-in temperature sensor, two ports for analog sensors, two dry contacts, two12V outputs for devices (for example, alarm beacons), USB port for camera, a slot for GSM modem and allows to connect up to 4 IP cameras.

#### **Connectable Sensors**

- Analog sensors
- CAN sensors
- AC / DC meters

#### Virtual sensors and elements

 Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers

#### **Network protocols**

- DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS
- RADIUS access with Login
- Supports SNMP v.1, v.2c, v.3

#### **Device management**

Web, SNMP, manually via SMS (using external USB modem)

#### Notifications

 E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get

#### Alert types

 FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem)

#### **Built-in functions**

- · Built-in clock time synchronization
- Built-in watchdog timer

#### Web interface

- Outlet management panel
- Sensor graphing
- Multi language support
- User Access and Permissions
- · Configurable embedded logic
- · IP cameras view panel
- Event log

#### Extensions

• GSM modem (VT700)

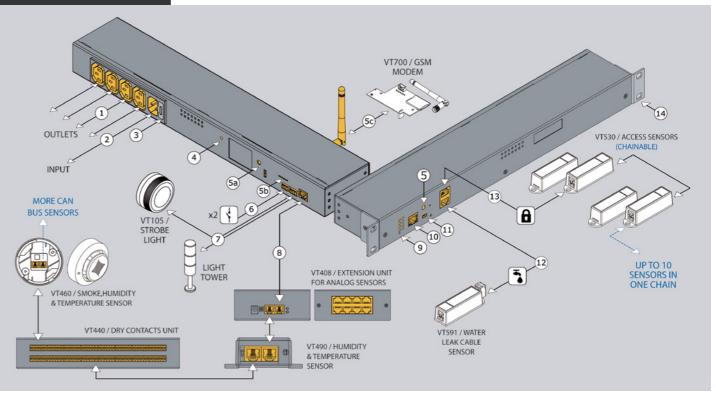
#### **Support & Origin**

- 2 Year warranty (extended possible)
- Manufactured in E.U.

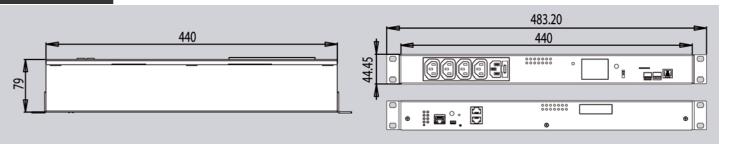
Processor ARM926EJ 300MHz					
Operating system	Linux 3.10.32				
ROM	512 Mbit NAND Flash				
RAM	64 Mb				
Inputs	x2 AutoSense RJ-12 ports x2 dry contact inputs CAN port for digital sensors Power inlet C14 (10A fuse)				
Outputs	x4 C13 outlets x2 12V 0.25A outputs				
LED status indicators	Power, Network, Relays, Error, CAN, Outlets				
Network interface	Ethernet 10-100 Mbit/s				
Built-in sensors	Temperature sensor (1%) Power supply voltage sensor (1%)				

Other connectors	USB (for camera, modem or Flash)
Power requirements	230V, 10A
Power consumption	10 Watt
Operating temperature	Min10° C, Max. +80° C
Operating humidity	Humidity: Min. 5%, Max. 80% (Non-Condensing)
Mounting	19" 1U Rack mount, Desktop (rubber feet included) Wall mounting (VT112 extension)
Expansion devices	VT700 / GSM modem
Weight	1.5 kg
Other	External enclosure earthing

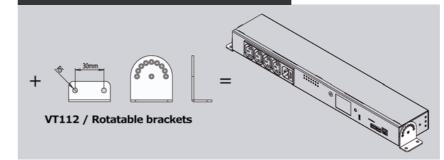
#### **Connection example**



#### **Dimensions**



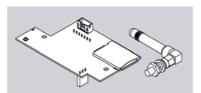
#### **Accessories (ordered separately)**



#### 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

#### **Extension order options (ordered separately)**



Extension	Info
VT700 / GSM modem	Needed when LAN is absent for sending SMS and voice messages.

### **Monitoring Units & PDUs Comparison tables**

Remote Control	VT325	VT335	VT805	VT825	VT825 DC
<b>Device Management:</b> Web, SNMP, manually via SMS					
Access to sensors: Three-tier data access with login			•		

Interface & Protocol support	VT325	VT335	VT805	VT825	VT825 DC
Interface: Access via any Internet browser.					
LAN: Ethernet 10/100 Mbit	•				
<b>Network protocols:</b> DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, LDAP, RADIUS	•		-	•	-
<b>Software:</b> Built-in software for events processing.	•				
Alert types: FTP, Syslog, SMTP or SNMP, SMS (GSM ordered separately)			•		
Pings: Built-in function for ping	•		•		
Clock: NTP synchronization			•		
Watchdog: Built-in watchdog timer					

Power	VT325	VT335	VT805	VT825	VT825 DC
Power supply:	+12V	+12V	+12V	90-230V	24 or 48V
Fuse:				1A	
Max. power consumption:	6W	10W	10W	10W	10W
The maximum current load on the relay:	250mA	250mA	250mA	10A	
<b>Power reservation:</b> 12V, built-in voltage monitor, voltage range 9-12.6V.	0	0	0	•	•

Inlets/Outlets	VT325	VT335	VT805	VT825	VT825 DC
Ethernet: 10/100 Mbit	•	•	•	•	
Mini USB AB: USB 2.0 HS					
<b>Analog port:</b> 6P4C for connection of any analog sensor.	2	4	8	8	8
<b>CAN BUS:</b> 6P6C.		•	•		
Relay outputs: latching relays 220-240V*10A				2	•
Alarm relays output: 12V	2	2	2	2	2
1-Wire extension:	•	•	•	•	•

External Memory & Surveillance	VT325	VT335	VT805	VT825	VT825 DC
SD card slot:			MicroSD	MicroSD	MicroSD

<b>Scalability</b> (modules, extensions & sensors are ordered separately)	VT325	VT335	VT805	VT825	VT825 DC
Extension modules VT408 and CAN sensors:	0	•	•	•	•
1-Wire extension board:	•	•	•	•	•
Dry contacts extension board:	0	0	0	•	•
GSM modem VT700:	USB	GSM	GSM	GSM	GSM

Other Features	VT325	VT335	VT805	VT825	VT825 DC
Installation:	Desktop or 19"	Desktop or 19"	Desktop or 19"	19"	19"
Dimensions (L x H x D) in mm:	140*35*80	180*35*80	200*44*80	440*44*75	440*44*75
Weight:	0,4 kg	1,2 kg	1,3 kg	1,5 kg	1,5 kg

Remote Control	VT604
Description:	Switched
Device Management: Web, SNMP, manually via SMS	
Outlet Management: Three-tiered with login	

Interface & Protocol support	VT604
Interface: Any browser.	-
LAN: Ethernet 10/100 Mbit	•
Network protocols: DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, LDAP, RADIUS	•
OS: Linux	3.10
Memory:	64Mb
CPU Speed:	300 mHz
Alert types: FTP, Syslog, SMTP or SNMP, SMS (GSM modem is ordered separately)	
Pings: Built-in function for ping	
LEDs: green: ACT, CAN, E1. E2; red: ERROR	5
LEDs: orange for relays	4
Clock: Built-in clock with time synchronization	•
Watchdog: Built-in watchdog timer	

Power	VT604
Power supply:	110-240V 50-60 Hz
Input:	C14 10A
Fuse: on inlet	10A
Outlets:	4 * 10A
Power consumption:	10Wt
Total power load:	2.4 kWt
Power output: Latching relays with LEDs indication on front panel	4

Inlets/Outlets	VT604
Ethernet: 100Mbit	
Mini USB AB: USB 2.0 HS	
Sensor ports: 6P4C for connection of any analog sensor.	2
CAN BUS: 6P6C for connecting up to 8 CAN devices per BUS.	
Bistable relays: latching relays 220-240V 10A with indication on the front panel	4
Socket: IEC 320 C13*10A	1

External Memory & Surveillance	VT604
USB flash card: Linux UVC Webcam with MJPEG format support	•

Scalability (these modules and sensors are ordered separately)	VT604
Extension modules and CAN sensors: up to 8 devices on one CAN BUS.	•
GSM modem VT720: Built-in into the master module.	•
Analog sensors: Connects 1 sensor or a chain of 1 analog sensor.	•

Operating environment	VT604
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	

Other Features	VT604
Installation:	19"
Dimensions (L x H x D) in mm:	440*44*75
Weight:	1,3 kg

## Extension units



Dimensions	44 x 23 x 15 mm
Weight	50 g
Inputs	1-Wire
Operating temperature	Min10 °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	Min10 °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



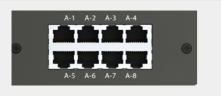


Board is mounted and connected inside of VT825 monitoring unit. Adds x8 dry contacts inputs, x2 loads (latching relays with LEDs indicators) & 12V DC power backup terminal.

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





Dimensions	110 x 40 x 68 mm
Weight	500 g
Inputs	x2 RJ-12 CAN ports x8 6P6C ports for analog sensors
Operating temperature	Min10° C, Max.80°C
Operating humidity	Min. 5% - Max. 95% (Non-Con- densing)

#### VT408 / Extension unit



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

Connects on CAN port and allows further CAN chain connection.

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

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

# VT4. The m for rac

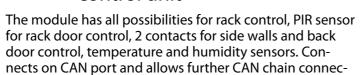
9



Dimensions	110 x 40 x 68 mm
Weight	500 g
Inputs	x2 6P6C CAN ports, x2 dry contact inputs
Operating temperature	Min10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	12V DC, 1A
Network Interface	CAN open

## VT430 / Rack control unit





Sensors and contacts appear in the system automatically.

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: $\pm$ 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





Dimensions	215 x 40 x 40 mm
Weight	0.5 kg
Inputs	x32 or x64 dry contacts inputs, x2 6P6C CAN ports
Operating temperature	Min10 °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



#### 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.

Inputs	x32 dry contacts inputs
Operating temperature	Min10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Con- densing)

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,

CAN sensors & devices



Inputs	2 x RJ-12
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min10° 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.

misiac tric ballaring.	
Automatic restoration of power after the a	ctuation

10 seconds
Red / Green Led
Ø100 × 45 mm
310 g
Wall mount
Measured Humidity - 0 95% RH, Accuracy • 3%,
Measured range: -10 +125 °C, Accuracy: $\pm$ 0.4°C
Mounting bracket included



9

2 x RJ-12
Min. 5% - Max. 95% (Non-Condensing)
Min10° C, Max.80°C
CAN open
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





Inputs	2 x RJ-12
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min40° 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

 $6 \hspace{1cm} 2$ 

## Analog sensors



Dimensions	60×18×18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min50° 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



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

# Dis Marian

340 g

**Operating temperature** Min. -50° C, Max.105°C

RJ-12 / RJ-11

Dimensions

Weight

Inputs

 $\emptyset7 \times 30$  mm, PVC cable 15 m

Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Accuracy	3% RH
Operating temperature	Min10 °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



$63 \times 66 \times 40 \text{ mm}$
125 g
RJ-12 / RJ-11
Min10 °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	$60 \times 18 \times 18 \text{ mm}$
Weight	106 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10° 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	Min10° 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.

RJ11 / RJ12 (6p4c)  Mounting bracket included  60 mW
3
60 mW
150 m
Optical sensor: Min. view distance 1 cm Max. view distance 3-4 cm
Sensor converter, optical sensor, mounting bracket, cable, screws, nuts, bolts & a sticker.

Analog sensors

Analog sensors



60 g

Operating temperature Min. -10° C, Max. +80°C

Dimensions

**Operating humidity** 

Weight

Inputs

60×18×18 mm

RJ-12 / RJ-11

Min. 5% - Max. 95%

(Non-Condensing)

#### 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.

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



Dimensions	60 × 18 × 18 mm
Weight	125 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

#### VT590 / Leak sensor

7

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	Ø100×45 mm
Weight	290 g
Inputs	x2 RJ-12
Operating temperature	Min10° C, Max. +80°C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

#### 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.

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



Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10° 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



Dimensions	105 × 57 x 40 mm
Weight	133 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10 °C, Max. +80 °C

#### VT570 / PIR sensor



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

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



Dimensions	Ø3 mm, length - 6, 10, 17, 25, 50 m.
Weight	15 g/m
Inputs	RJ-12 / RJ-11
Operating temperature	Min50 °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

 $60 \times 61 \times 16 \text{ mm}$ 

Min. 5% - Max. 95%

(Non-Condensing)

-12V / +12V

4 pin terminal

150 g

**Operating temperature** Min. -10 °C, Max. +80 °C

**Dimensions** 

**Power input** 

Outputs

**Operating humidity** 

Weight

#### 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	Min10 °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





Dimensions	68 × 47 x 26 mm
Weight	160 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10 °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



#### 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



Dimensions	60 × 61 × 16 mm
Weight	150 g
Operating temperature	Min10 °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



Analog sensors

Analog sensors



#### 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	Min10 °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



V/T/120	/ Converter 4-20mA
V 14/U	/ CONVENIER 4-70MA



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	Min10 °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

## Wireless sensors



Dimensions	60 x 50 x 15 mm
Weight	50 g
Outputs	SMA GSM
Operating temperature	Min10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Con- densing)

#### 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



#### VT730 / Wireless dual sensor



Wi-Fi temperature & humidity sensor.

Dimensions	68 × 47 x 26 mm
Weight	125 g
Operating temperature	Min10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Mounting	Mounted inside monitoring unit using x3 screws M3*5
Package includes	Sensor, Screws



Dimensions	Size Ø50 x 520 mm
Weight	180 g
Operating temperature	Min10 °C, Max. 80 °C

#### VT6604 / GSM antenna 3m



For use with all types of GSM modems, 5.8GHz antenna design with dual band of 900MHz.

Beam pattern - omnidirectional.

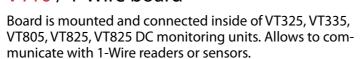
Mounting	Has a magnet at the bottom base.
	Cable: RG174 SMA,
	Impedance: $50\Omega$ ,
	Frequency: 890-960 / 1710-1890 /
Special features	1920-2170 MHz,
	Gain: 7 dBi,
	VSWR: ≤2.0,
	Polarization: vertical

## 1-Wire sensors



Dimensions	44 x 23 x 15 mm
Weight	50 g
Inputs	1-Wire
Operating temperature	Min10 °C, Max. 80 °C

#### VT10 / 1-Wire board



Operating humidity	Min. 5% - Max. 95% (Non-Con- densing)
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	60×18×18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

#### VT581 / Temperature sensor

Sensor is needed for measurement of temperature in-

Chain connection is possible.

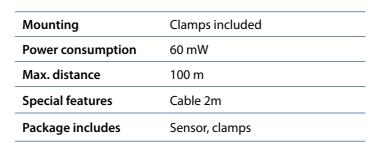
Mounting	Mounting bracket included
Power consumption	60 mW
Max. distance	150 m
Special features	Daisy chain connection possible.
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, sticker



#### 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	Min50 °C, Max. 105 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)





Dimensions	60 × 18 × 18 mm
Weight	60 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min10 °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.

## 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.

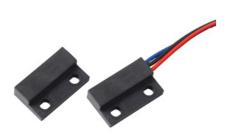
Mounting	Wall mount
Special features	Rated voltage: 12V; Current: alarm 250 mA; Sound pressure: 108 dB; Tone frequency: 3.8 kHz; Flash frequency: 2.5Hz red 150/ min; Power consumption: 250 mA; Cable: 3m;
Package includes	Device, clamps, screws

#### 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-lon, 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



Dimensions	82 x 82 x 22 mm
Weight	106 g
Operating temperature	Min10 °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

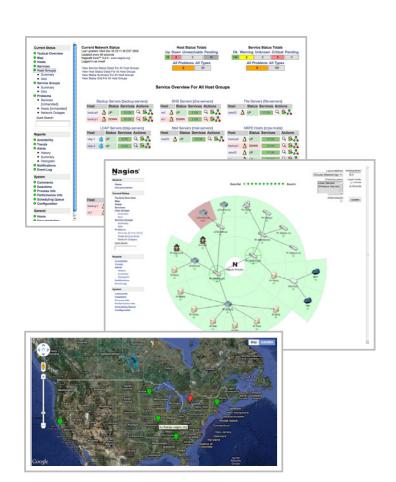


Can be used with VT8xxx monitoring master units.

Dimensions	86 x 59 x 1 mm
Weight	7 g
Operating temperature	Min10 °C, Max. +80 °C
Special features	Memory: 64 bit, Standard: EM4100, Frequency: 125 kHz,



<script>



#### Centralized Infrastructure Management Software:

#### Nagios / OpenNMS / Zabbix

pre configured for Vutlan monitoring systems

Achieve instant awareness of IT infrastructure problems, so downtime doesn't adversely affect your business.

Complete monitoring and alerting for servers, switches, applications, and services.

#### You can:

- Monitor your entire IT infrastructure
- Spot problems before they occur
- Know immediately when problems arise
- Share availability data with stakeholders
- Detect security breaches
- Plan and budget for IT upgrades
- Reduce downtime and business losses

Visit our documentation page for more info:

https://vutlan.atlassian.net/wiki/display/DEN/ Management+software

### Scripts, Plugins & Tools: All management scripts are run in accordance with Vutlan API. API is currently available on request.

#### Scripts:

- Daily backup of settings on FTP
- Sensor readings script

#### Plugins:

Nagios plugin

#### Tools:

- Program to send SMS from your computer
- Settings duplicator software

Visit our documentation page for more info:

https://vutlan.atlassian.net/wiki/display/DEN/ Management+software

#### Software scalability options

Tables below depict the most common general software scalability options available for Vutlan monitoring unit.

#### 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

controls

Plug & Play

Sensor data import

#### 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

Formulas to adjust sensor values

Graphs and Multi-graphs

**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

E-Mail

**Notifications** 

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

#### **Rack Monitoring Solution**

Computer room servers, rack mounted equipment and cabinets are an expensive asset in IT infrastructure. It is imperative to insure that the rack and it's equipment are performing fault-free, and as efficient as possible. With Vutlan monitoring systems and sensors, it is easy to evaluate environmental data in a straightforward way to prevent failure of equipment.



#### Sensor extension unit

VT408 allows to increase the number of sensors connected to any monitoring unit. Adds up to 8 sensors.



#### Vibration sensor

VT540 detects vibration.



#### Monitoring unit

VT805 / Environmental monitoring unit actively monitors the conditions in your rack, alert and notify facility managers.



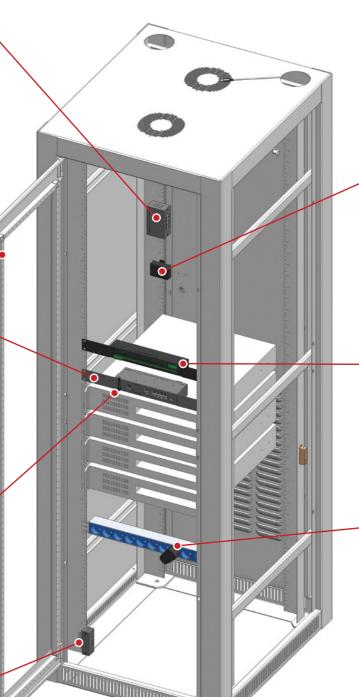
#### **GSM** modem

VT700 is needed when LAN is absent for sending SMS and voice messages.



#### Rack control unit

VT430 includes an access sensor for rack door control, x2 dry contacts for side walls, temperature and humidity sensors.





#### Sensor extension unit

VT408 allows to increase the number of sensors connected to any monitoring unit. Adds up to 8 analog sensors.



#### Dry contacts unit

VT440 adds 32 or 64 dry contacts inputs.



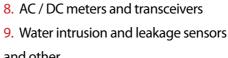
#### AC voltage monitor

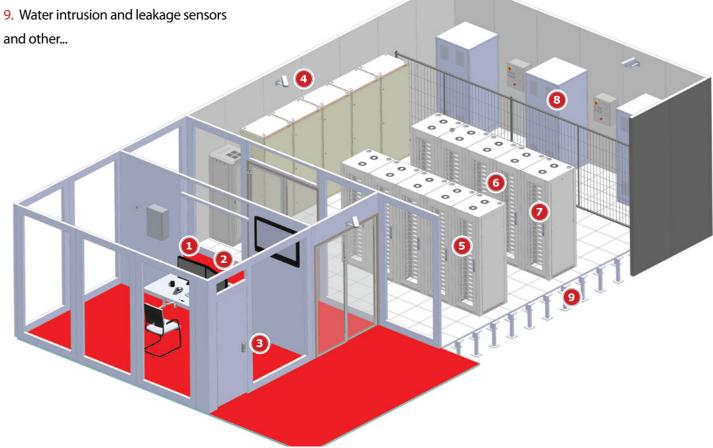
VT520 is needed for measurement of AC 90-250V.

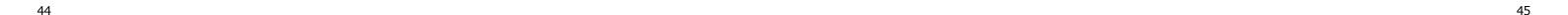
#### **Data Center Monitoring**

Failure or even the shut down of a data center can result in high losses and endangers a company's business operations. Therefore, monitoring of complex IT-infrastructure is mission-critical for data center operators and companies. It is important to not only monitor SNMP devices, but also to check continuously housing technology. It is an imperative to check, if the HVAC is up and running, temperature and humidity of the server room are not crossing predefined critical thresholds or if the access control is working properly. Providing warning of failures or potential failures on time, will insure maximum efficiency of a data center while minimizing service losses due to slowdowns or breakdowns. Vutlan monitoring and control equipment can monitor every aspect of the IT environmental infrastructure such as temperature, leakage, humidity, power supplies and so on.

- 1. Web interface or Centralized Infrastructure Management Software for network operator
- 2. Notifications and alerts: SMS, E-mail, SNMP trap, SNMP get
- 3. Proximity and ITouch readers, door contacts (remote access granting and role based permissions)
- 4. IP cameras (JPEG stream) and USB camera with picture logging
- 5. Smoke, humidity, vibration and temperature sensors
- 6. Metered, managed and switched power distribution units
- 7. Airflow and automation of ventilators and conditioners







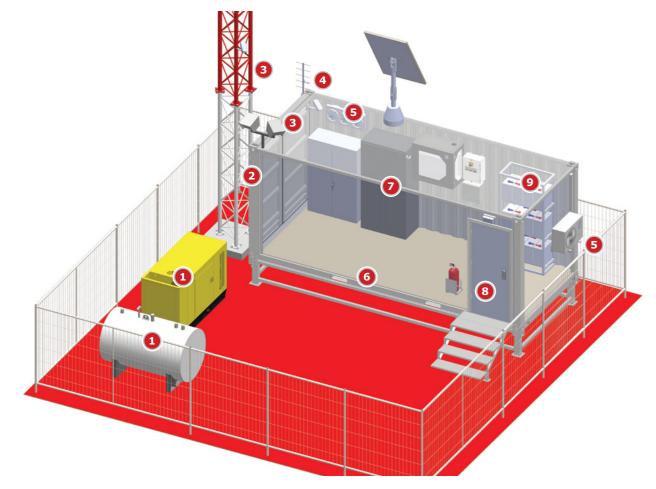
Solutions

#### **Telecommunication BTS Site Solution**

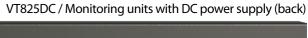
Using Vutlan monitoring and control solutions for remote BTS sites (Cell sites), helps to meet two main challenges: efficiency and security. Our monitoring units provide the Network Operation Center information about key parameters regarding the condition of the site in real-time, help to manage maintenance of the site and make proper decisions, cutting costs for personnel and operational expenses and provide sensor logs for root cause analysis for future problem prevention. A vide variety of sensors with predefined thresholds help to prevent unauthorized access, theft and damage to the site, monitor technical equipment and energy consumption. Notifications and alerts keep maintenance personnel constantly informed about the condition of their telecommunication infrastructure. Logic schemes help to provide an easy-to-use method for monitoring and controlling the equipment as well as to help set-up a reliable alert and notification system.

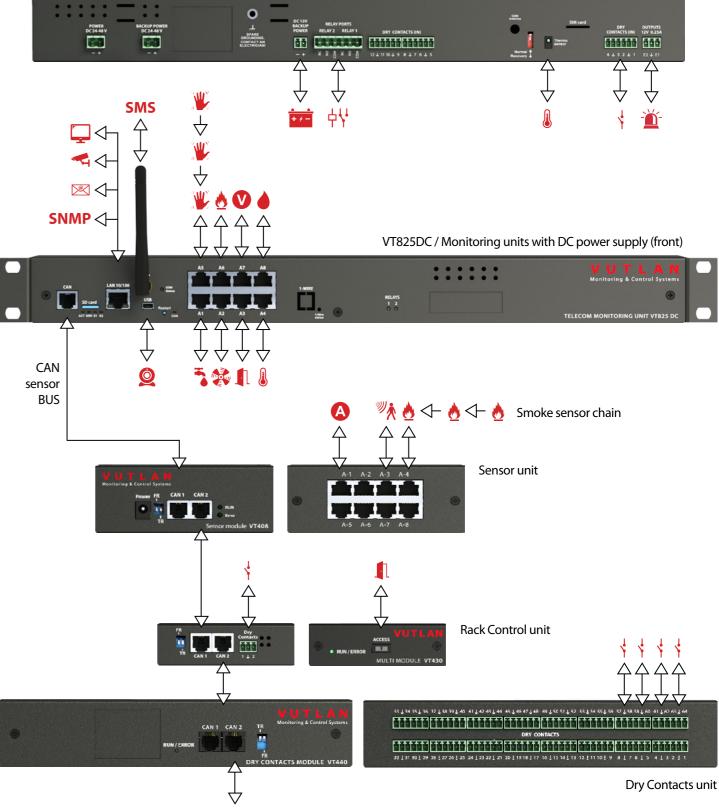
- 1. Fuel level and viscosity sensors (active and passive third party sensors can be connected using VT420 converter 4-20mA)
- 2. Day & night lights control pared with motion detectors
- 3. IP cameras (JPEG stream) and USB camera with picture logging
- 4. Notifications and alerts: SMS, E-mail, SNMP trap, SNMP get
- 5. Automation of ventilators and conditioner
- 6. Water intrusion and leakage sensors
- 7. Smoke, humidity, vibration and temperature sensors
- 8. Proximity and ITouch readers, door contacts (remote access granting and role based permissions)
- 9. AC / DC meters and transceivers

and other...



#### **Example connection diagram**





Further connection



www.vutlan.com



## Data center & Telecom environment monitoring and control

#### Vutlan s.r.o.

43, ul. Svornosti, 82106 Bratislava, Slovak Republic

Tel.: +421 2 4524 1440 Mob.: +421 908 399 047 E-mail: info@vutlan.com Skype: live:vasily\_70, www.vutlan.com