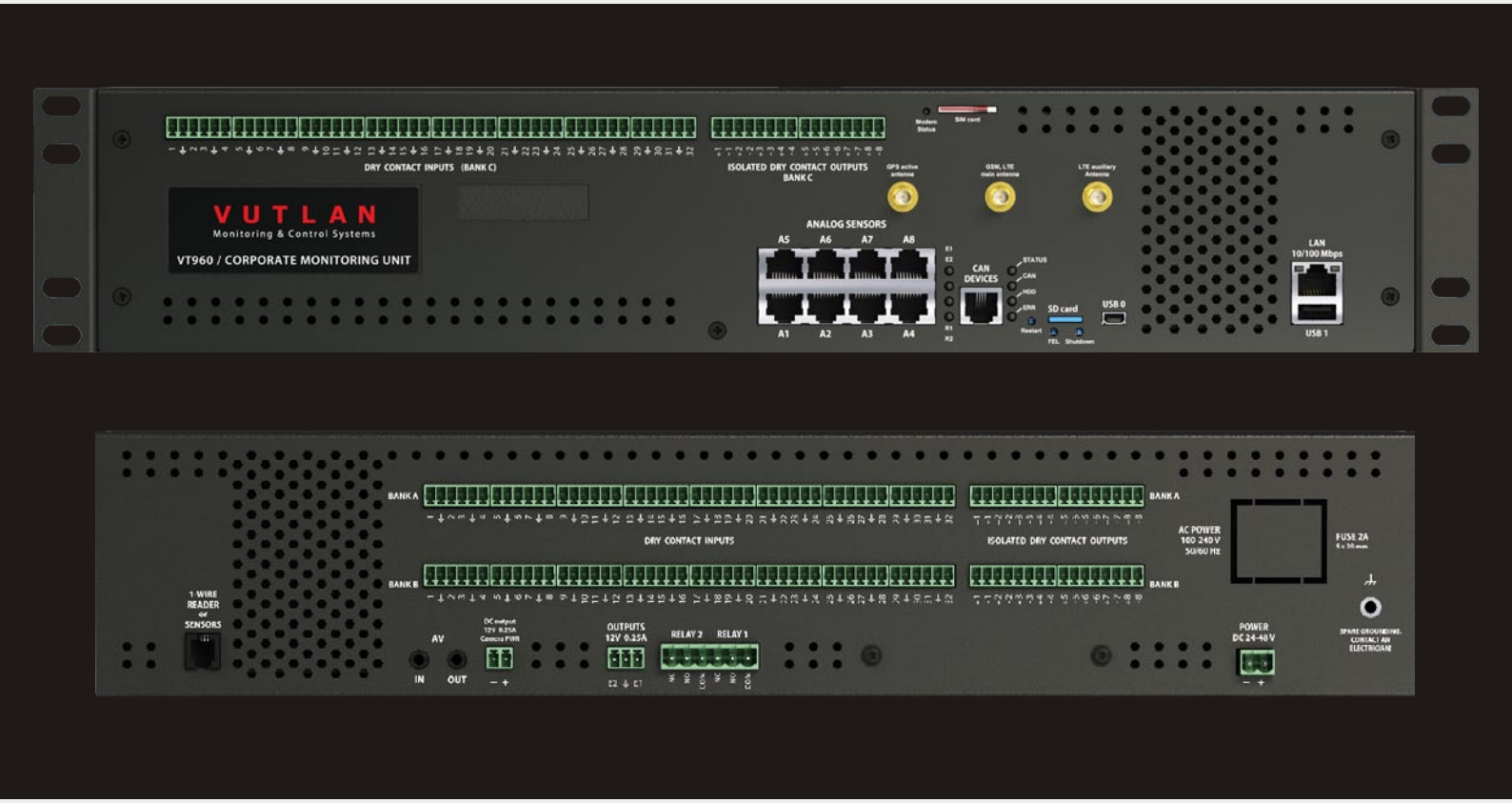
VUTLAN

Monitoring & Control Systems



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

For :

- **Data centers**
- **Telecoms**
- **IT SOHO**

March 2019

Company Profile

Vutlan s.r.o. is leading European manufacturer of environmental monitoring systems; PDUs; analog, digital and wireless sensors; AC / DC meters and other monitoring and control equipment for server rooms.

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.

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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.

✓ 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

Our People

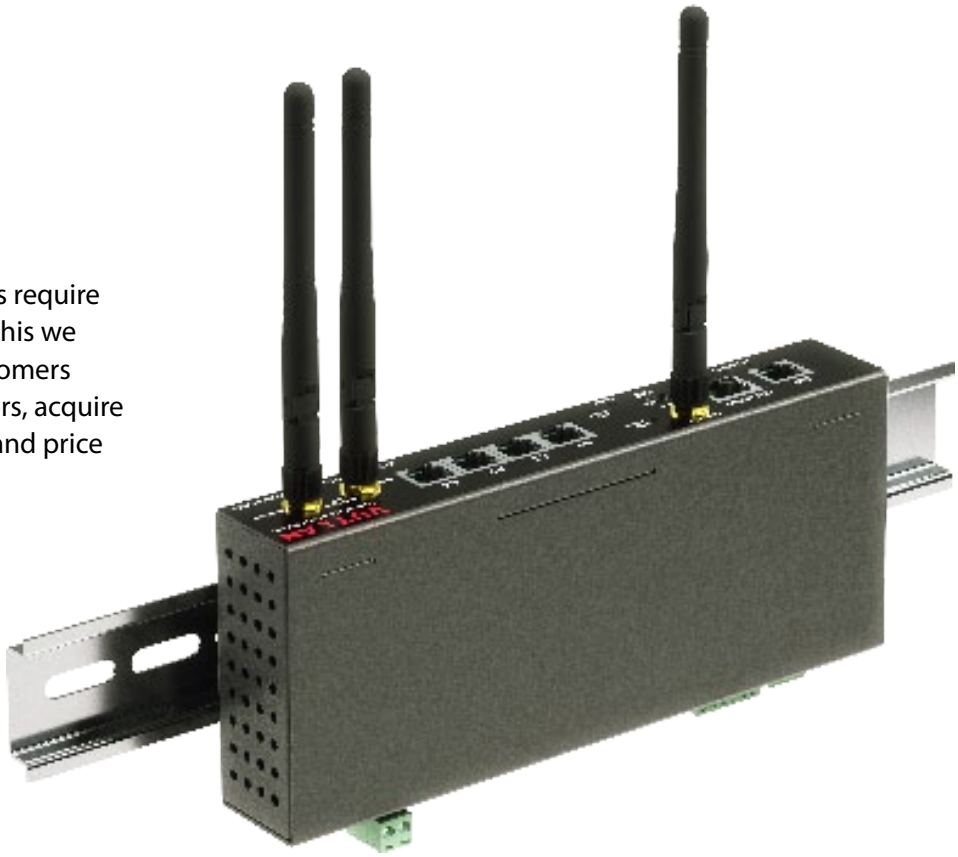
At Vutlan, people are our most valuable asset. Our employees embody our core values and bring unmatched industry experience, talent and drive to each customer engagement. We employ highly motivated individuals who thrive in our complex and constantly evolving industry. All employees are encouraged to 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.

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.



Real-time 360° monitoring and control of entire IT infrastructure

Environmental monitoring

Maintaining a stable environment where equipment and/or products are housed is critical for their continued operation, protection and use. Vutlan units monitor all major environmental parameters and report any critical system states immediately.

Early fire detection

Detecting fires or smouldering fires at an early stages is critical in order to prevent great damage. Vutlan offers "smoke, humidity and temperature sensor" with high smoke sensitivity and precise temperature, humidity measurement.

Leakage detection

Water or liquid damage caused by leaks can cause serious damage over time if not prevented in time. Vutlan offers a very powerful, and potentially money saving water leak detection system.

Access control

Managing users access and monitoring their access is vital for any enterprise. Vutlan systems provide access control using electronic keys combined with readers and push/exit locks.

VUTLAN
Monitoring & Control Systems

Building automation
Control aspects of the building remotely or use schedules to coordinate your equipment. Vutlan's solutions include: dry contacts, relays, converters, power outlets and etc...

rglary and sabotage protection
an products allow effective monitoring for intrusion and instantly alert via custom fications and alarms. Products include n/close sensors, motion detectors and eras.

Power monitoring
Electric supply systems are the lifeline of any mission-critical infrastructure. We offer various current and voltage sensors for monitoring of DC and AC electrical circuits.

Embedded Web Interface

Simplicity and Flexibility

Our web interface is flexible enough to empower you with all the tools you need to monitor and control your mission critical facility. The interface is built-in inside every Vutlan monitoring unit. Simply type in the IP address of the unit in the browser. Real time dashboards with live update and status information. The interface is divided into sections: Overall Stats, System Tree, Dry Contacts, Event Log, Logic Schemes, Cameras, Map, Users, CAN configuration, Graphs, Outlets, Preferences, System Menu.

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, days.

Multi Language Support

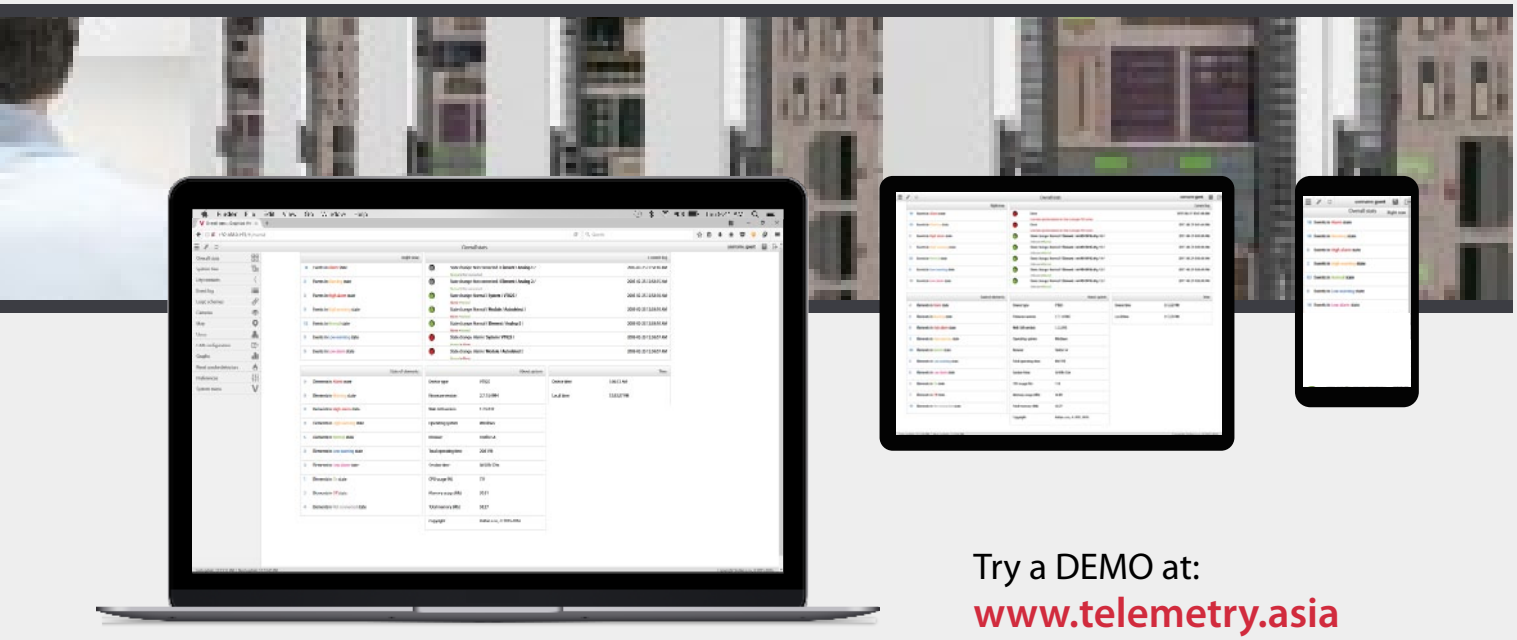
Our web interface is available in English, Russian, German, French, Italian, Spanish, Czech, Polish, Korean & etc.. If you require another language, it is easy to make a translation.

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

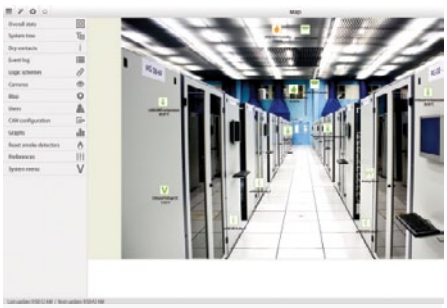
Using "view" and "write" rights, user access can be restricted to the sub-systems of the device using groups of access permission. User access can also be restricted to a specific group .of sensors.



Try a DEMO at:
www.telemetry.asia

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 resolution.



Map

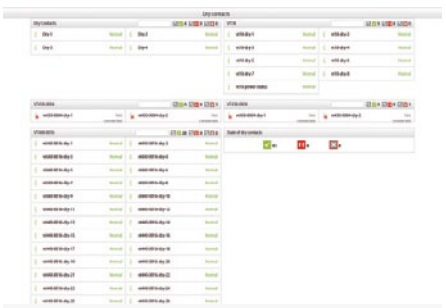
9 virtual elements: Group, E-mail (message), SNMP trap, SMS, Timer, Trigger, PING, SNMP Get, IP Cam.

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.

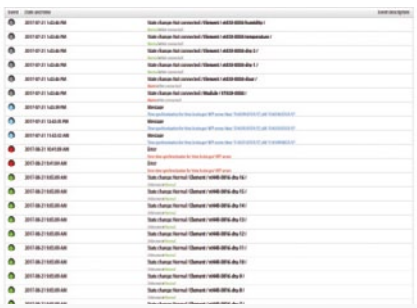
First run wizard

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.



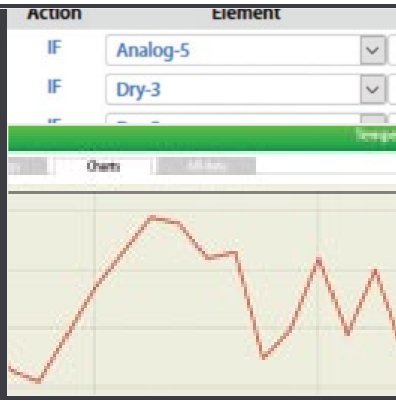
Event Log

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”.

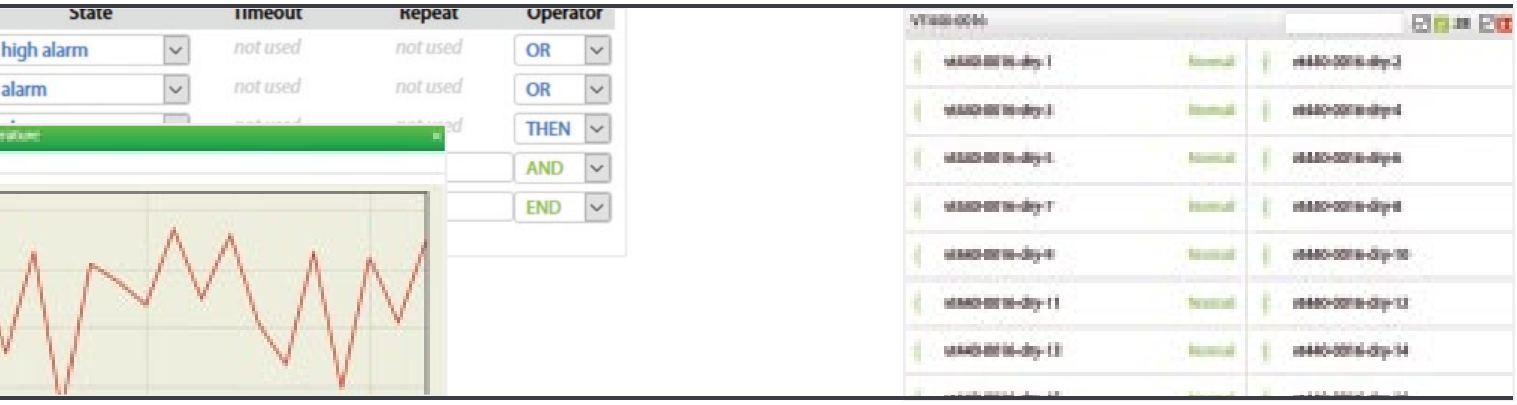
Vutlan Environmental Monitoring

Options

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



		Temperature	Humidity	Water Leakage	Airflow	Access	Water Level	AC / DC	Smoke & Fire	Wire
Ext-s	VT11 / Dry contact out									
	VT18 / Extension board									
Analog sensors	VT500 / Temperature sensor	●								
	VT501 / Outdoor temperature sensor	●								
	VT510 / Humidity sensor		●							
	VT520 / AC voltage monitor							●		
	VT530 / Access sensor					●				
	VT531 / Optical access sensor					●				
	VT540 / Vibration sensor									
	VT550 / Wind velocity meter				●					
	VT560 / Smoke detector								●	
	VT570 / PIR sensor									
	VT590 / Leak sensor			●						
	VT591 / Cable leak sensor									
	WDC / Water detection rope			●						
	VT700, VT720, VT760 / GSM modems									●
Digital CAN sensors	VT430 / Rack control unit	●	●							
	VT440 / Dry contacts unit									
	VT32 / Dry contacts board									
	VT460 / Smoke, humidity & temp. s.	●	●						●	
	VT470 / PIR, vibration & temp. ss	●								
	VT490 / Humidity & temp. sensor	●	●							
Accessories	VT103 / Alarm beacon									
	VT105 / Strobe light									
	VT107 / RFID card reader					●				
	KMS-30 / Access sensor, magnet					●				
AC / DC meters	HOS-100Q1 / DC current sensor							●		
	HAT-100Q1 / AC current sensor							●		
	VT410 / DC voltage monitor							●		
	VT420 / Converter 4-20mA									
1-Wire	VT581 / Temperature sensor	●								
	VT585 / Thermocouple converter	●								
Cameras	USB34 / USB mini camera									
	USB100 / USB dome camera									
	USB258 / USB bullet camera									



eless	Cameras	Sound	Light	Dry contacts IN	Dry contacts OUT	Power Relay	Outputs 12V	Outlets	PING	Vibra-tion	Motion	Con-verter
					●							
				●		●						
										●		
											●	
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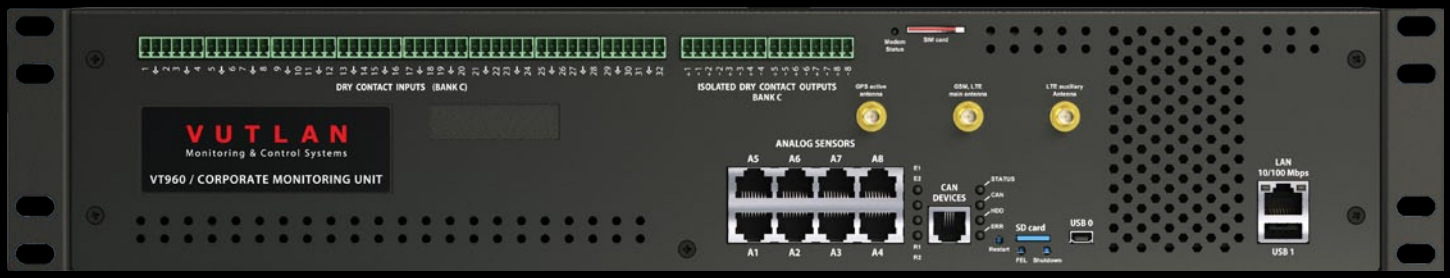
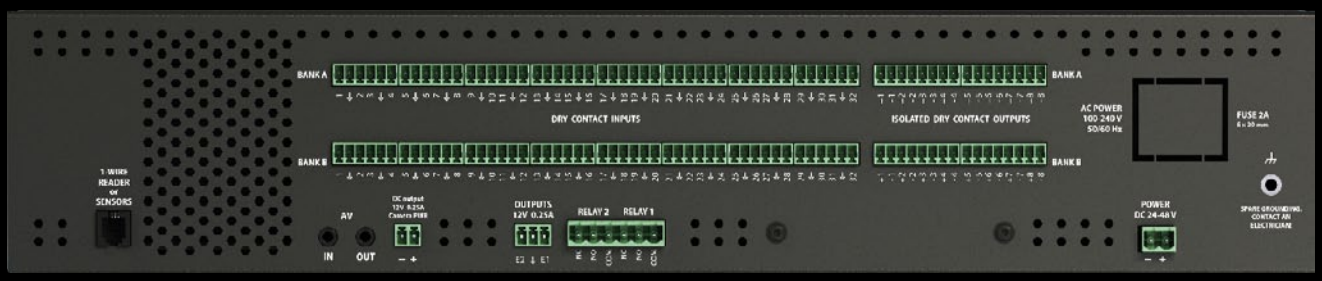




VT960 & VT960 DC / Corporate Monitoring Units

The units are used for control of multi dry contacts premises, temperature, humidity, voltage, leakage, smoke, airflow, doors control. Can control up to 120 Dry contacts and use 1000 different elements - notifications, triggeres, timers, logics, sensors, dry contacts.

Connectable Devices

- Analog, 1-Wire sensors; AC / DC meters; IP, USB, Analog Cameras; Reader; SATA; LTE modem/router; 12V devices and etc.

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

- LTE, 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

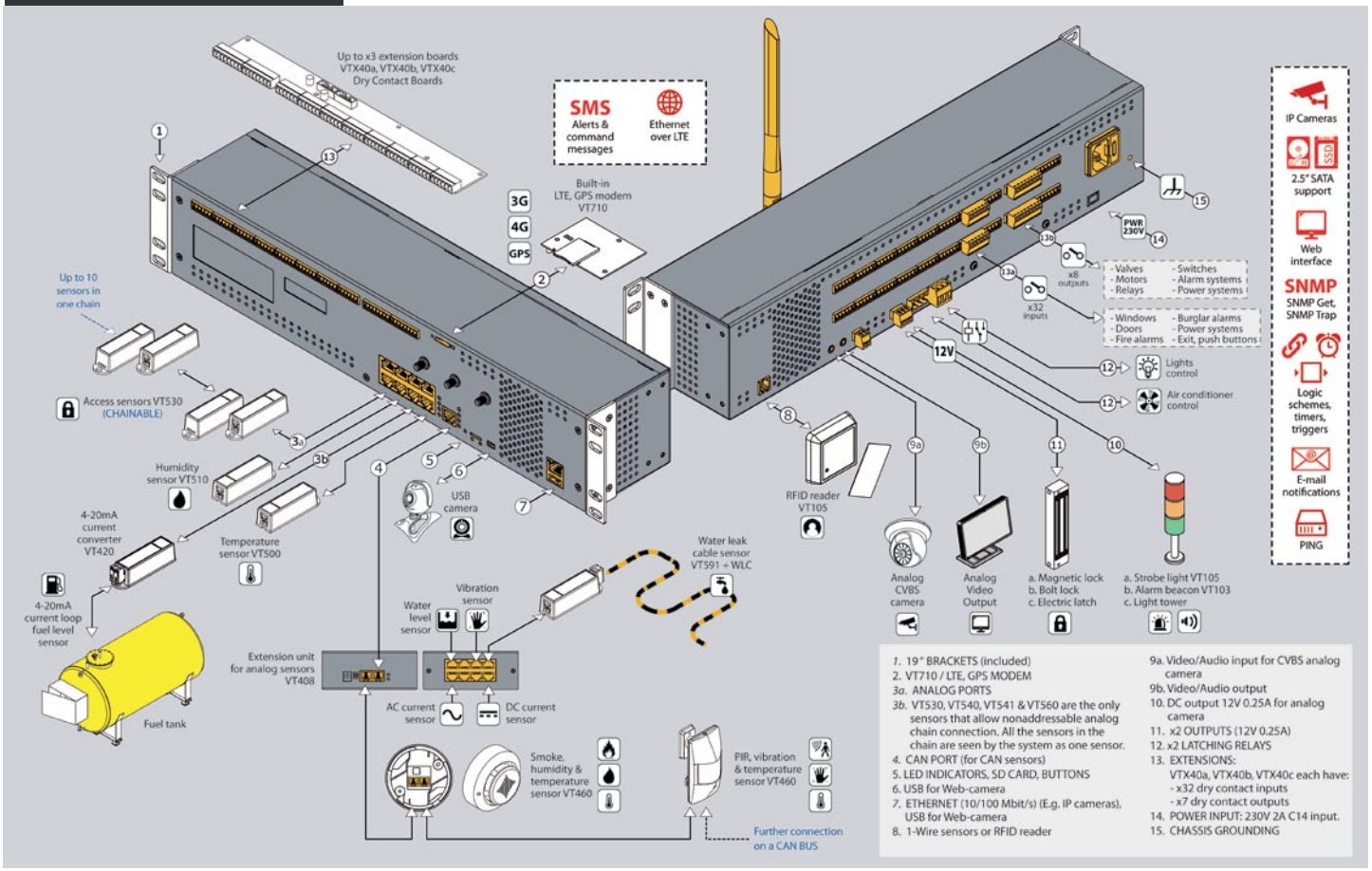
Support & Origin

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

Processor & OS	Dual-core ARM Cortex-A7 / 1GHz / 1GB / Debian Linux
Inputs	- Up to 120 dry contacts inputs and outputs; - 8 analog ports for sensors; - digital CAN bus for sensors; - HS USB & USB - AV video / audio - 1-Wire (iTouch reader);
Outputs	- two 12V 0,25A outputs; - two latching relays - AV video / audio
Network interface	Ethernet port 10-100 Mbit/s

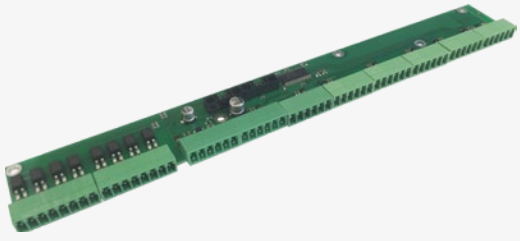
Other connectors	USB (for camera, modem or Flash)
Power requirements	DC 48V or C14, 240V, 10A
Power consumption	3-10 Watt, 0.12 A
Expansion devices (ordered separately)	- 2,5" SATA (HDD or SSD) - LTE modem/router VT710 - Up to x3 boards of VTX40 / Dry contacts board - VT10 / 1-Wire Board
Built-in sensors	Temperature sensor (1%)
Operating temperature	Min. -10° C - Max.80° C
Other	SD card slot

Connection example



Extension: Internal LTE, GPS modem

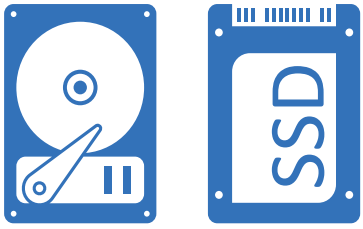
- Provides Ethernet over LTE;
- Can work as a router;
- Adds time over GPS;
- Allows to receive and send messages;



Extensions: Dry Contact Boards

For doors, windows, fire-alarms, burglar alarms, power systems, circuit breakers, exit / push buttons and etc

- VTX40a for Bank A; VTX40b for Bank B; VTX40c for Bank C;
- VTX40a replaces default VTX16 board in Bank A;
- Each VTX40 has: + 32 dry contact inputs
  + 8 isolated dry contact outputs.



Internal 2.5" SATA support

Ordered separately. Possible to use 2.5" HDD or SSD. Used for:

- Saving logs of sensor data for analysis and evaluation;
- Record digital video and audio to remote servers or internal SATA drive. Stream video directly to the operator via analog or through a web interface.
- Linux based software. For example, NMS SNMP built in client, database, SMS server;

VT900 & VT900 DC / BTS Monitoring Units

The unit is used for temperature, humidity, voltage, leakage, smoke, airflow, doors control in the server rooms, for monitoring of cabinets and facilities. Can use up to 1000 different elements - notifications, triggeres, timers, logics, sensors, dry contacts.

Connectable Devices

- Analog, 1-Wire sensors; AC / DC meters; IP, USB, Analog Cameras; Reader; SATA; LTE modem/router; 12V devices and etc.

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

- LTE, 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

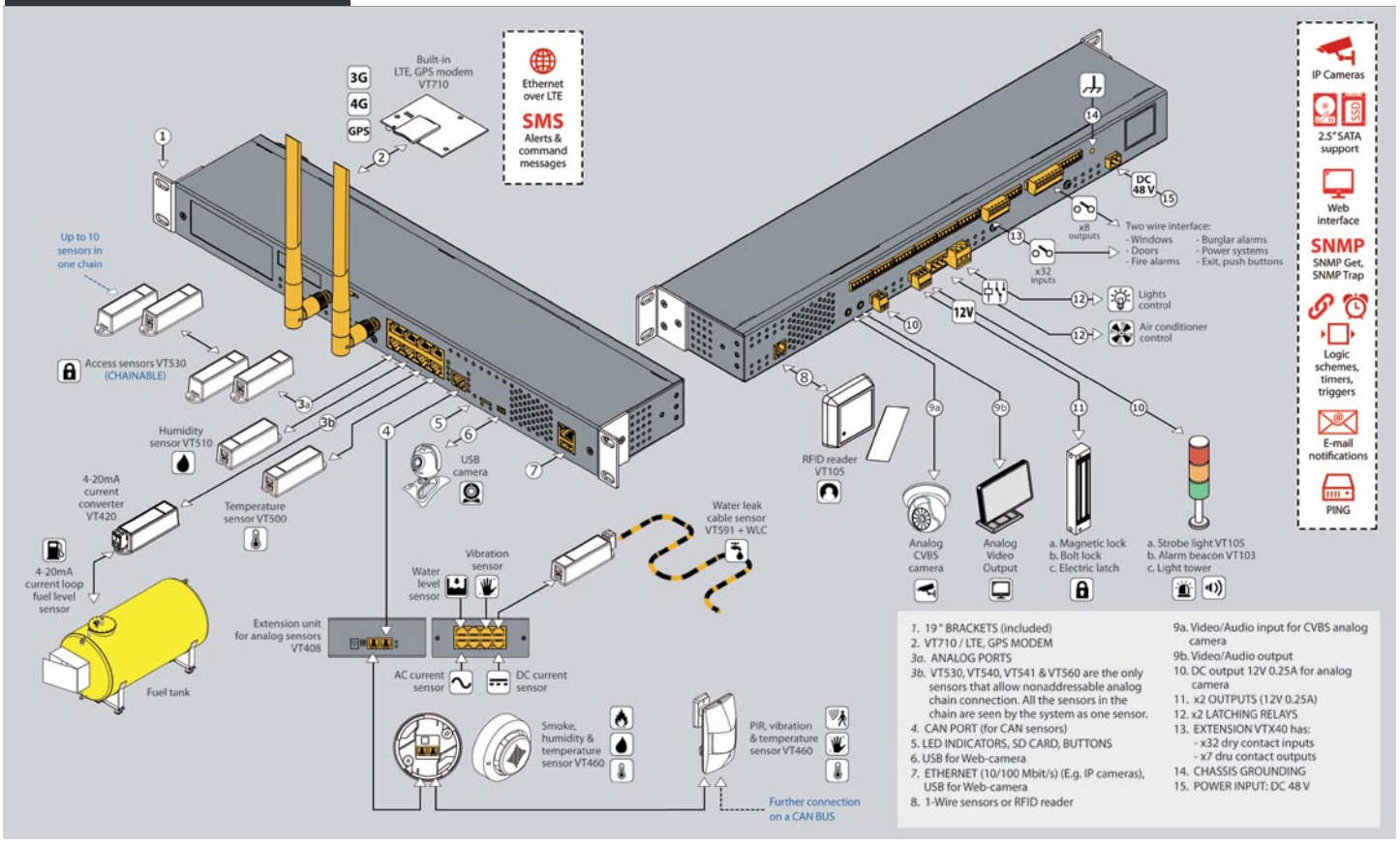
Support & Origin

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

Processor & OS	Dual-core ARM Cortex-A7 / 1GHz / 1GB / Debian Linux
Inputs	- Up to 40 dry contacts inputs and outputs; - 8 analog ports for sensors; - digital CAN bus for sensors; - HS USB & USB - AV video / audio - 1-Wire (iTouch reader);
Outputs	- two 12V 0,25A outputs; - two latching relays - AV video / audio
Network interface	Ethernet port 10-100 Mbit/s

Other connectors	USB (for camera, modem or Flash)
Power requirements	DC 48V or C14, 240V, 10A
Power consumption	3-10 Watt, 0.12 A
Expansion devices (ordered separately)	- 2,5" SATA (HDD or SSD) - LTE modem/router VT710 - VTX40 / Dry contacts board - VT10 / 1-Wire Board
Built-in sensors	Temperature sensor (1%)
Operating temperature	Min. -10° C - Max.80° C
Other	SD card slot

Connection example



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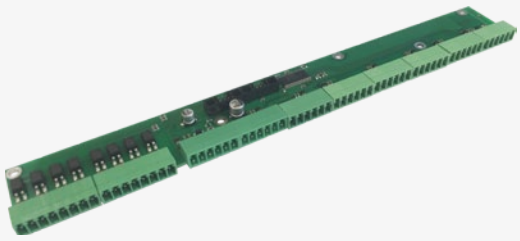
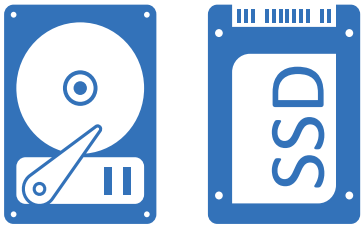


Extension: Dry Contact Board

For doors, windows, fire-alarms, burglar alarms, power systems, circuit breakers, exit / push buttons and etc

- VTX40a for Bank A
- VTX40a replaces default VTX16 board in Bank A;
- VTX40 has: + 32 dry contact inputs
  + 8 isolated dry contact outputs.



Internal 2.5" SATA support

Ordered separately. Possible to use 2.5" HDD or SSD. Used for:

- Saving logs of sensor data for analysis and evaluation;
- Record digital video and audio to remote servers or internal SATA drive. Stream video directly to the operator via analog or through a web interface.
- Linux based software. For example, NMS SNMP built in client, database, SMS server;

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
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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

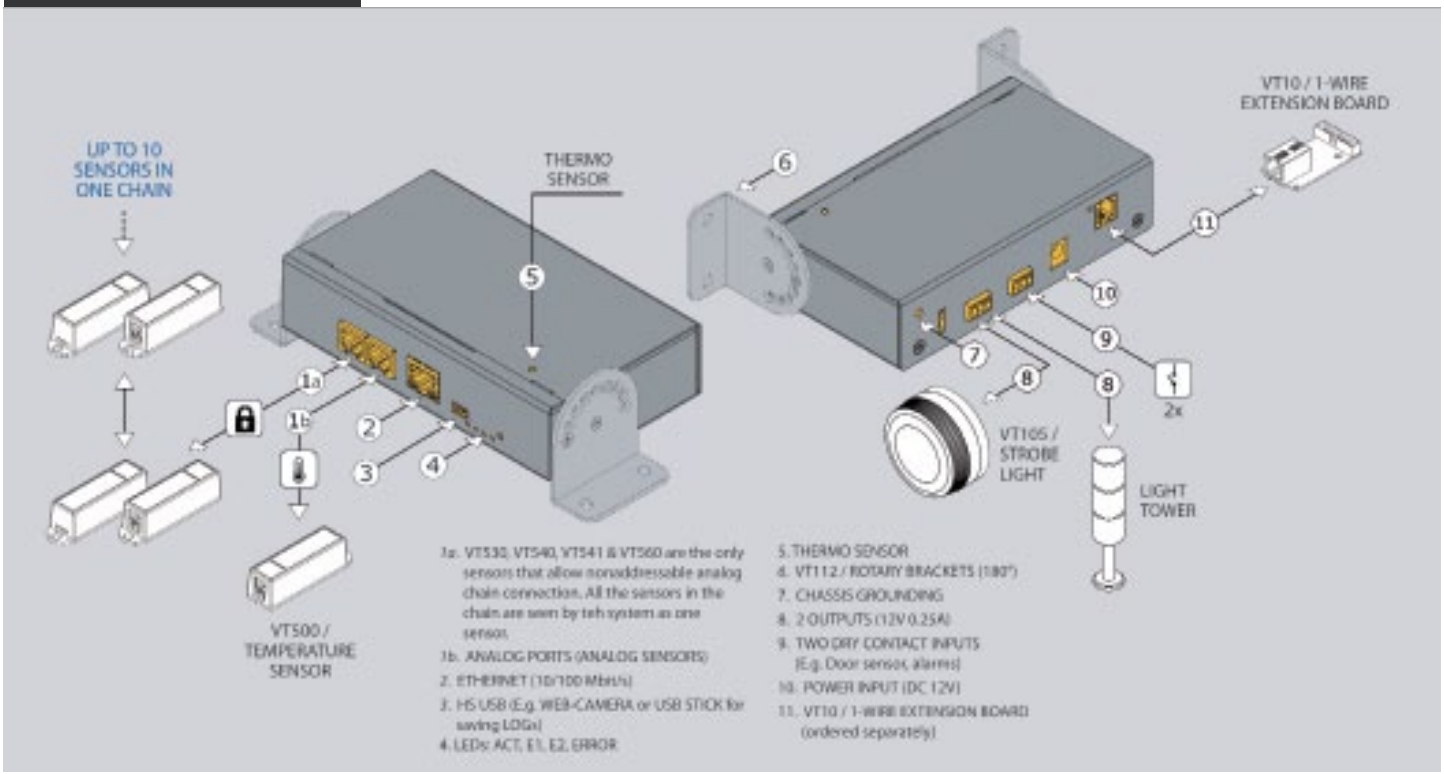
Support & Origin

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

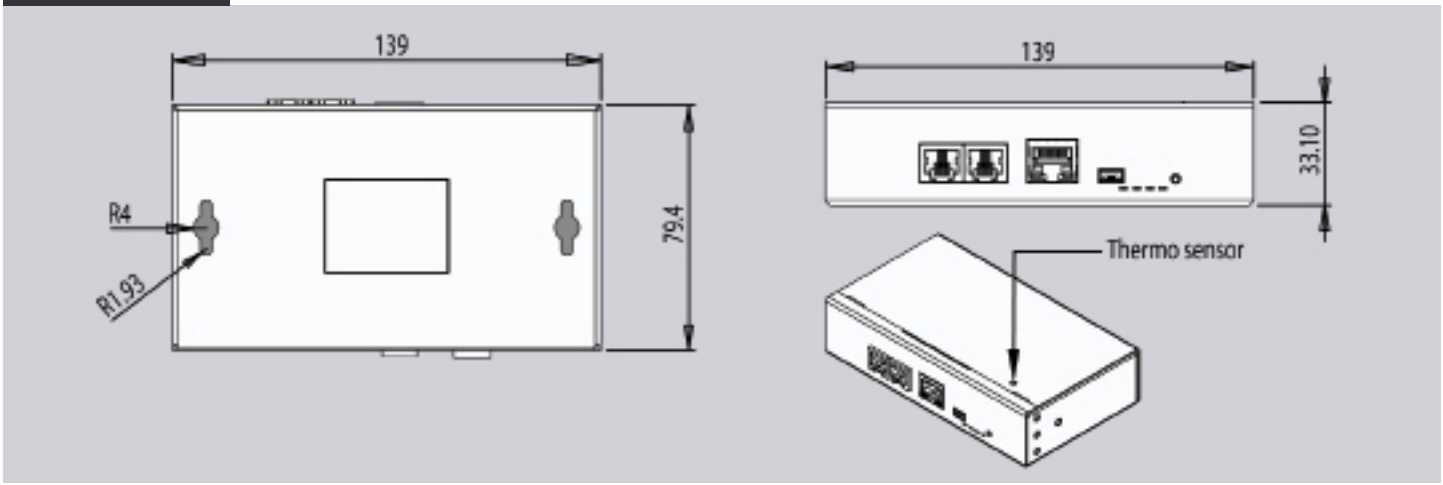
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x2 AutoSense RJ-12 ports x2 dry contact inputs
Outputs	x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays & Error
Network interface	Ethernet 10-100 Mbit/s
Other connectors	USB (for camera,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

Power consumption	3-10 Watt, 0.12 A
Operating temperature	Min. -10° 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

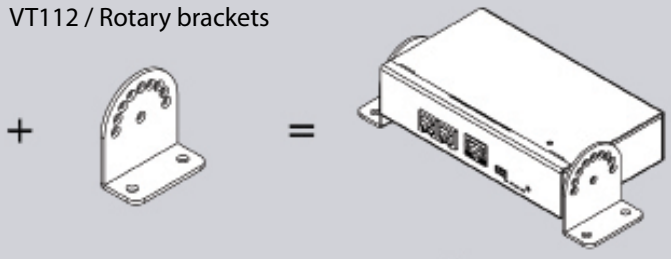


Dimensions



Accessories (ordered separately)

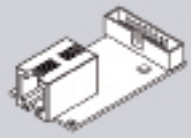
VT112 / Rotary brackets



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
- Quick 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

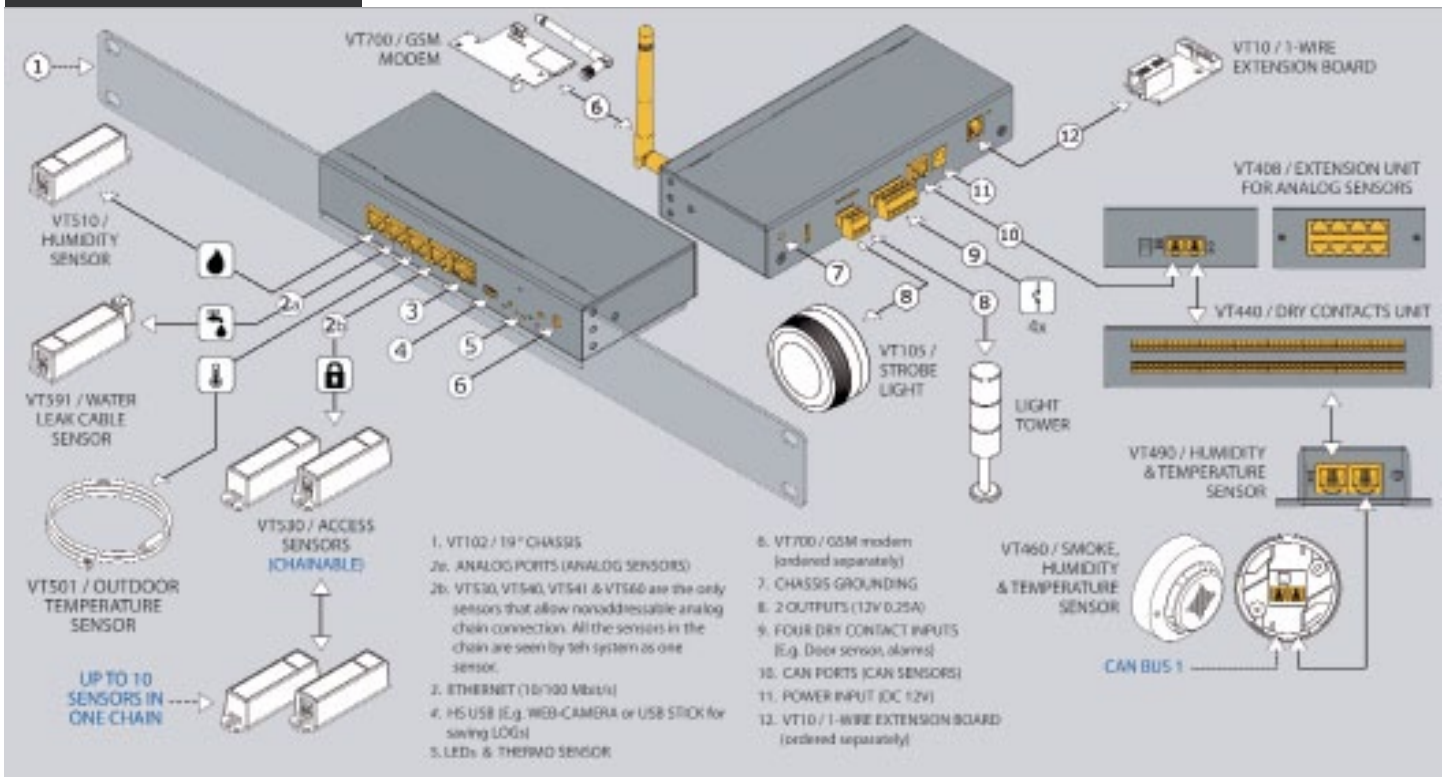
Support & Origin

- 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)

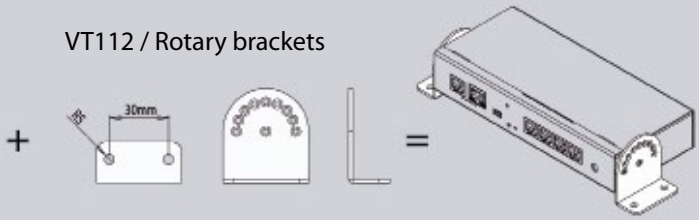
Power requirements	DC 12V, 1A
Power consumption	3-10 Watt, 0.12 A
Operating temperature	Min. -10° C, Max. +80° C
Operating humidity	Humidity : Min. 5%, Max. 80% (Non-Condensing)
Mounting	Desktop, 19" mounting Wall mount (VT112 extension)
Weight	1.2 kg
Other	External enclosure earthing
Dimensions	157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

Connection example



Accessories (ordered separately)

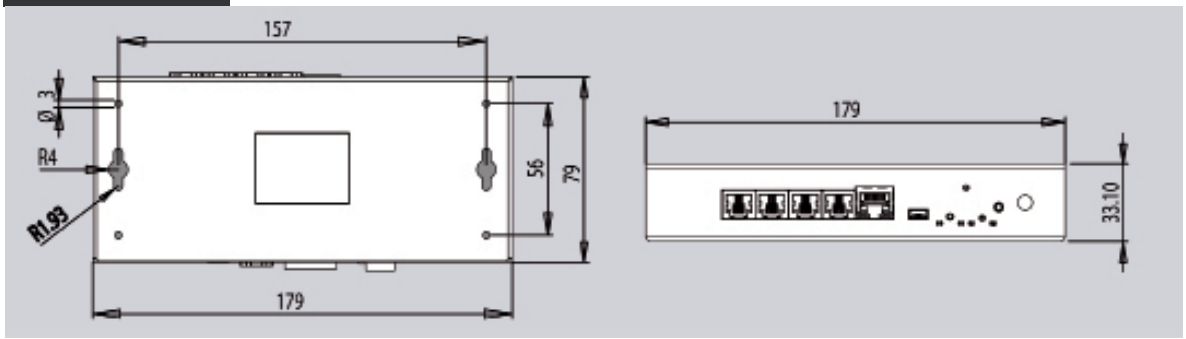
VT112 / Rotary brackets



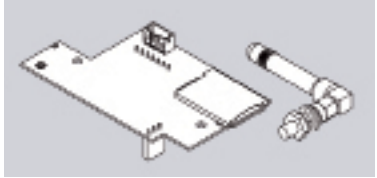
Package includes

- 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
- Quick manual
- Warranty card
- 19" bracket

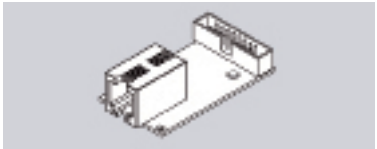
Dimensions



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.

BTS Monitoring unit
VT335 DC

VT335 DC 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, Ethernet access using GPS (LTE, GPS modem is ordered separately)

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

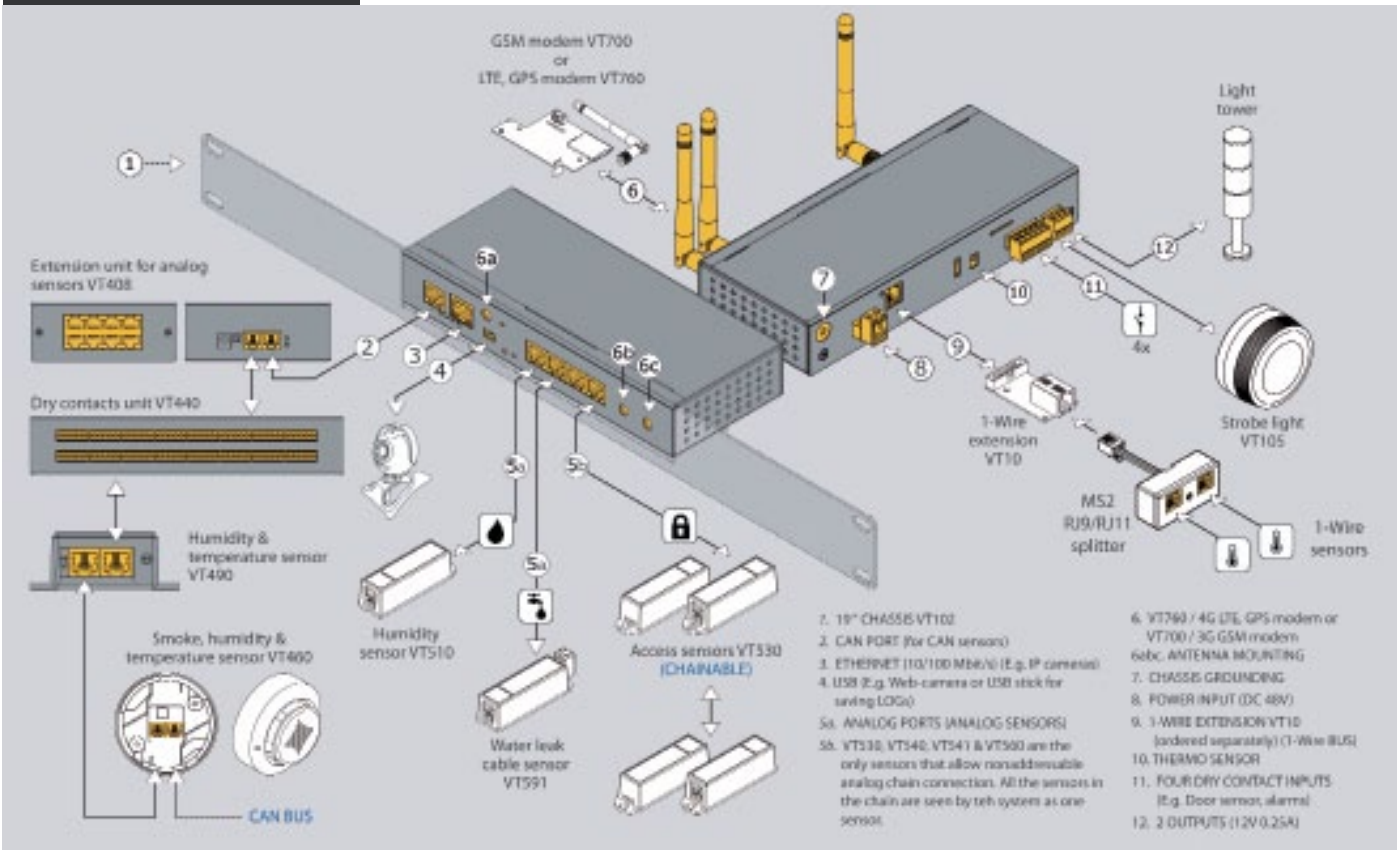
Support & Origin

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

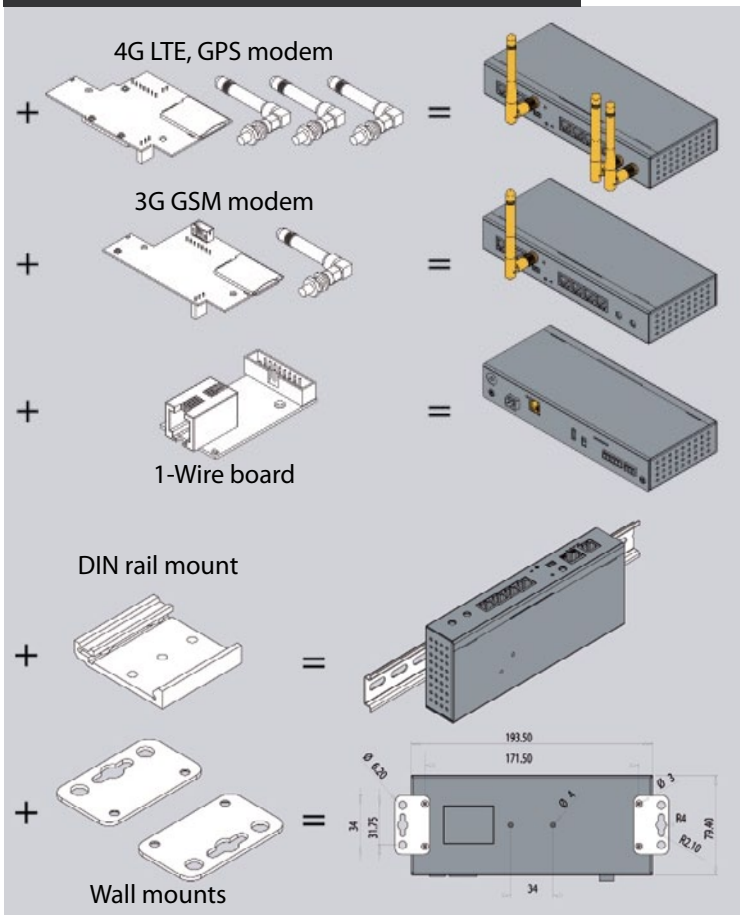
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x4 AutoSense RJ-12 ports x4 dry contact inputs
Outputs	x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays & Error, CAN
Network interface	Ethernet 10-100 Mbit/s
Built-in sensors	Embedded temperature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

Power requirements	DC 48V, 120mA
Power consumption	6 Watt
Operating temperature	Min. -10° 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	194 x 80 x 33 mm

Connection example



Accessories (ordered separately)



VT700 / 3G GSM modem

Needed when LAN is absent for sending SMS and voice messages.

VT760 / 4G LTE modem

Adds ethernet access using GPS & adds option to send SMS and voice messages. (Available September 2018!)

VT10 / 1-Wire board

Allows to communicate with 1-Wire readers or sensors.

DIN rail mount

Allows to mount the unit on DIN rail.

Wall mounts

Allows to mount the unit on the wall.

Package includes

- Monitoring unit
- RJ-45 1m patch cable
- Terminal plug 5.08 mm / 2P
- Terminal plug 3,5 mm / 6P
- Terminal plug 3,8 mm / 3P
- USB-Mini to USB cable
- Self-adhesive rubber foot - 4 pcs
- Quick manual
- Warranty card

RMS VT805+

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, TLS
- 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)

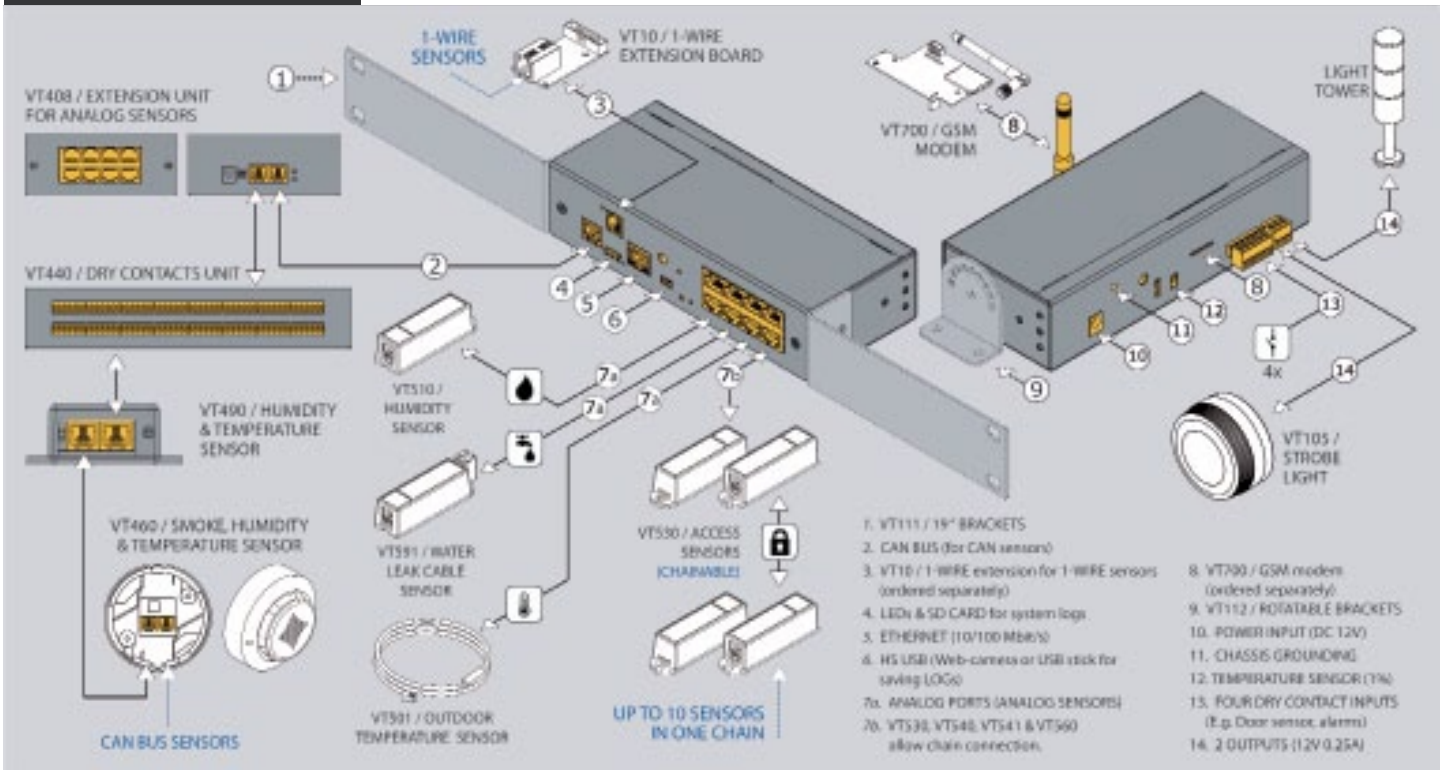
Virtual sensors and elements

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

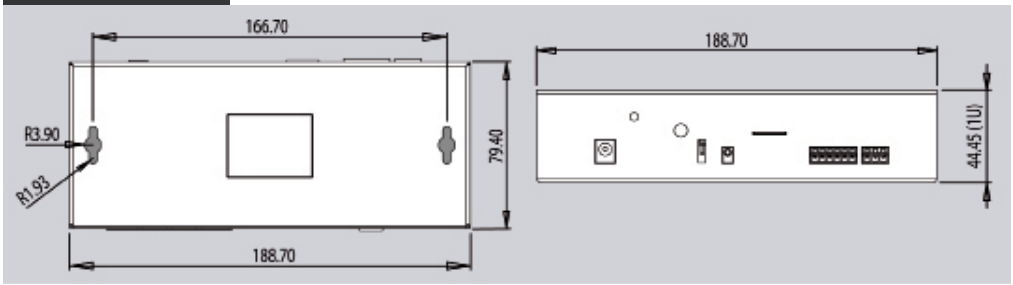
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x8 AutoSense RJ-12 ports x4 dry contact inputs CAN open port for CAN sensors
Outputs	x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays, Error, CAN
Network interface	Ethernet 10-100 Mbit/s
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	Min. -10° 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



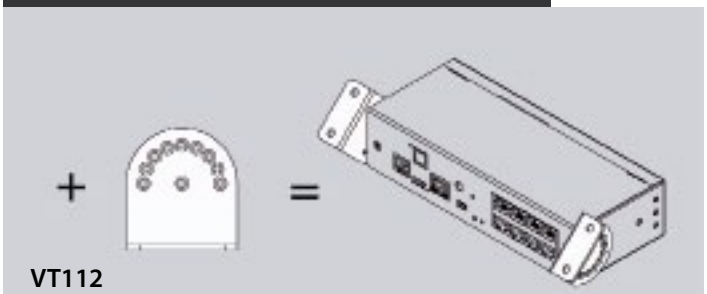
Dimensions



Package includes

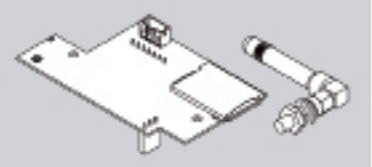
- 12 V adapter
- RJ-45 1 meter patch cable
- x4 Rubber foot
- Quick guide
- Terminal plug 6 pins, 3.5 mm - 1 pcs
- 3.81 mm - 1 pcs
- Warranty card
- 19" mounting brackets

Accessories (ordered separately)

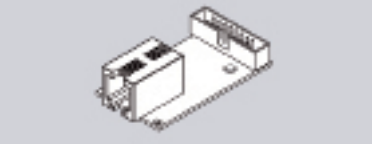


VT112
Rotatable mounting brackets

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+

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)

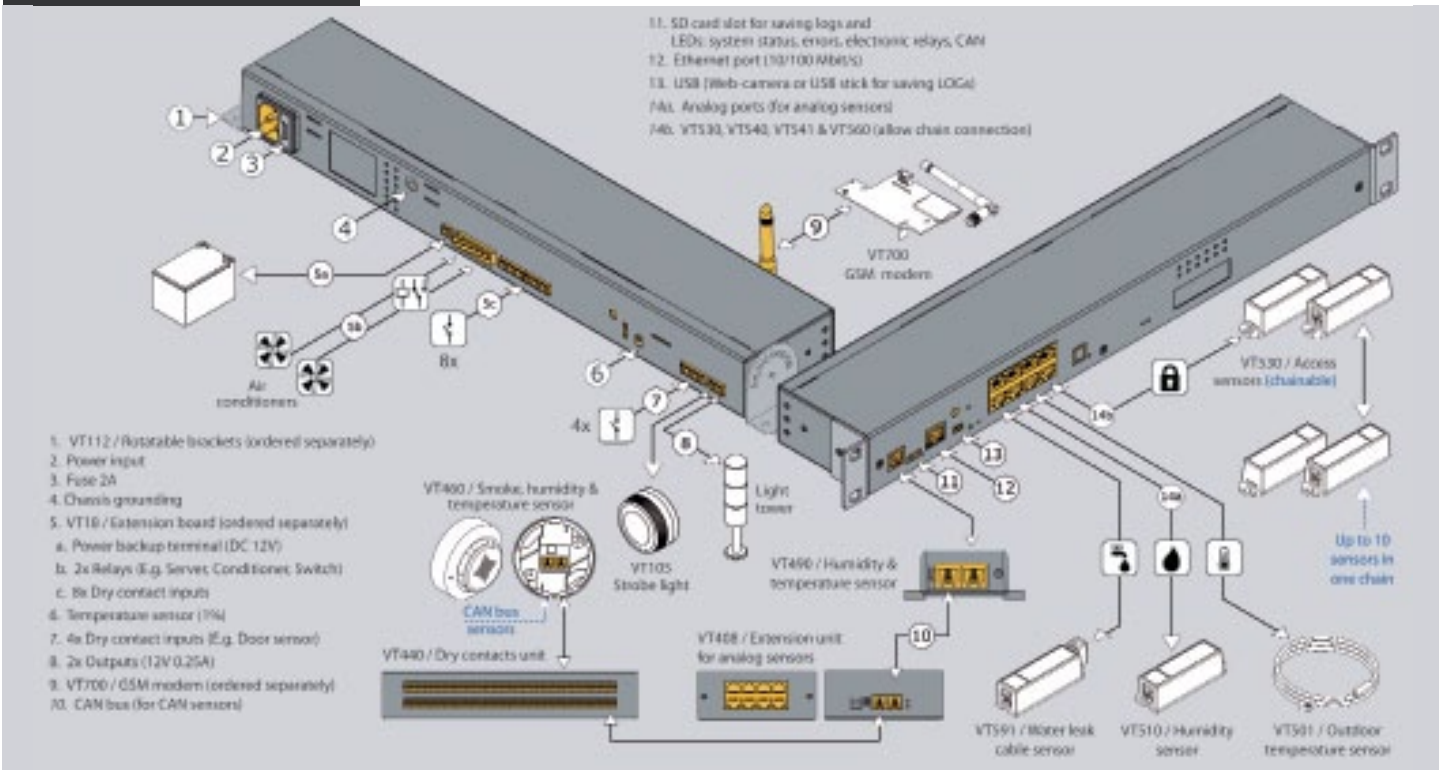
Support & Origin

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

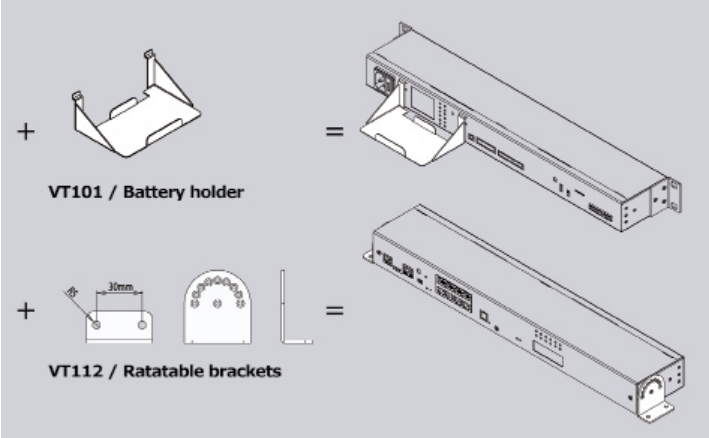
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
Memory	ROM: 512 Mbit NAND Flash, RAM 64 Mb
Inputs	CAN open port for digital sensors x8 AutoSense RJ-12 ports x12 dry contact inputs
Outputs	x2 12V 0.25A outputs x2 loads (latching relays with LEDs indicators)
LED status indicators	Power, Network, 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
Operating temperature	Min. -10° C, Max. +80° C
Operating humidity	Humidity : Min. 5%, Max. 80% (Non-Condensing)
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



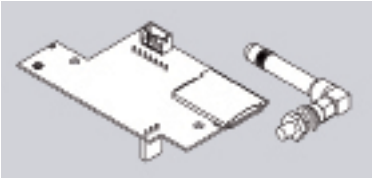
Accessories (ordered separately)



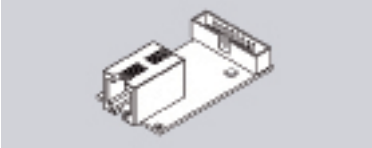
Package includes

- 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)

Telecom Monitoring Unit VT825DC

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)

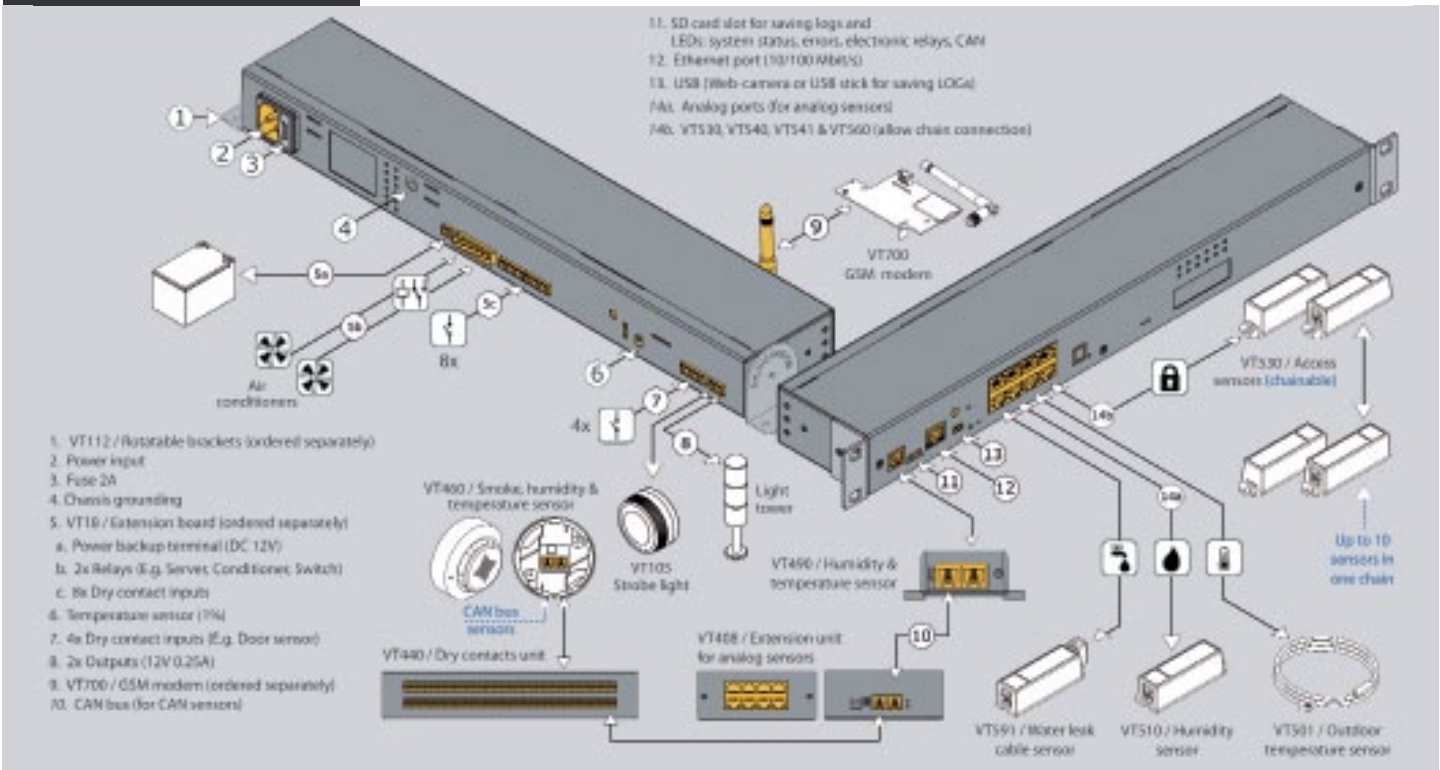
Support & Origin

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

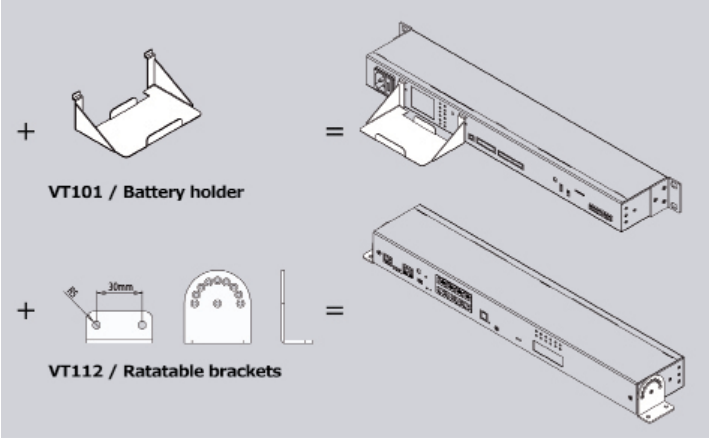
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
Memory	ROM: 512 Mbit NAND Flash, RAM 64 Mb
Inputs	CAN open port for digital sensors x8 AutoSense RJ-12 ports x12 dry contact inputs
Outputs	x2 12V 0.25A outputs x2 loads (latching relays with LEDs indicators)
LED status indicators	Power, Network, 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
Operating temperature	Min. -10° C, Max. +80° C
Operating humidity	Humidity : Min. 5%, Max. 80% (Non-Condensing)
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



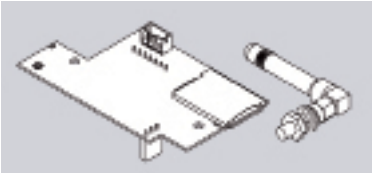
Accessories (ordered separately)



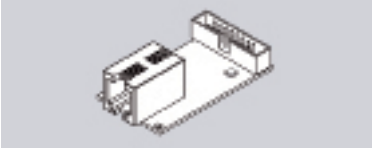
Package includes

- 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)

Switching PDU VT604

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)

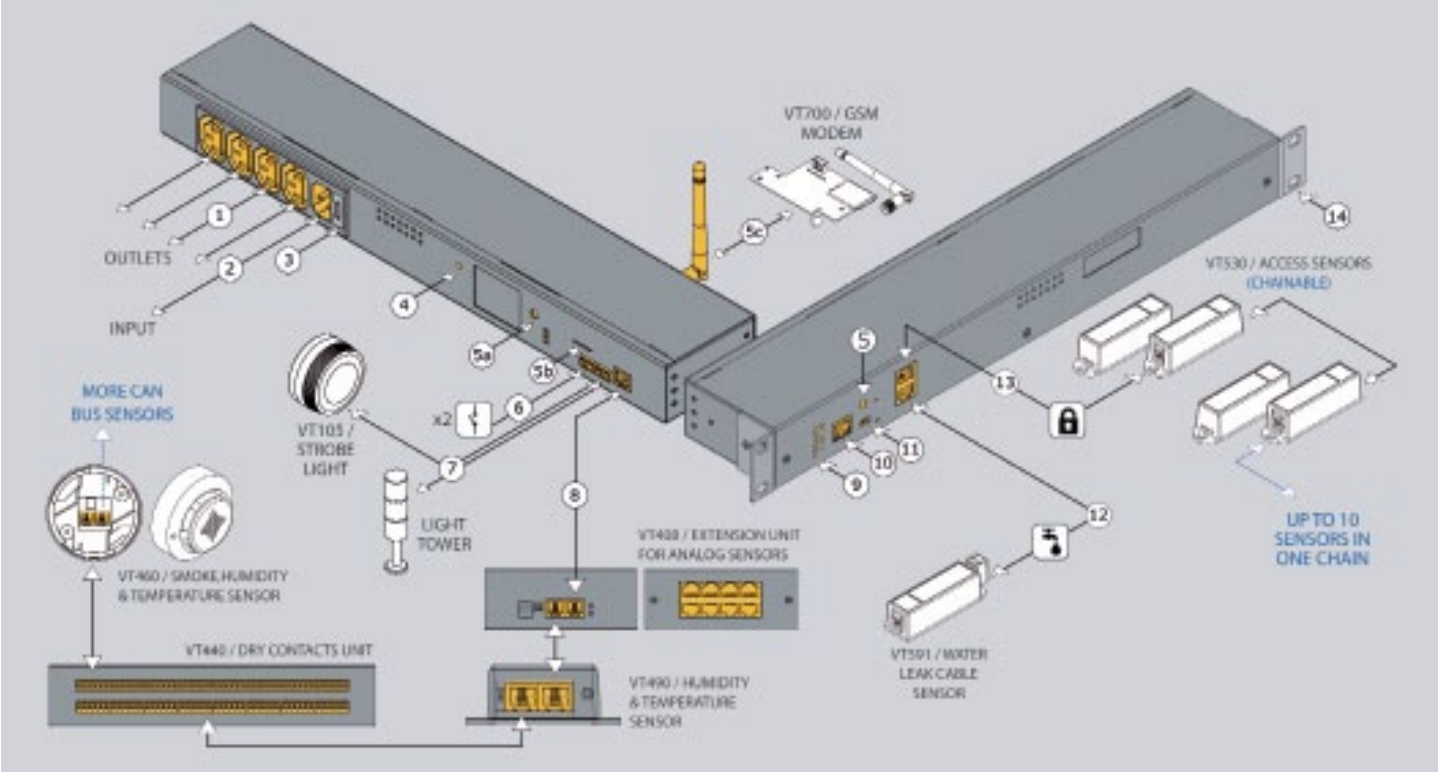
Support & Origin

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

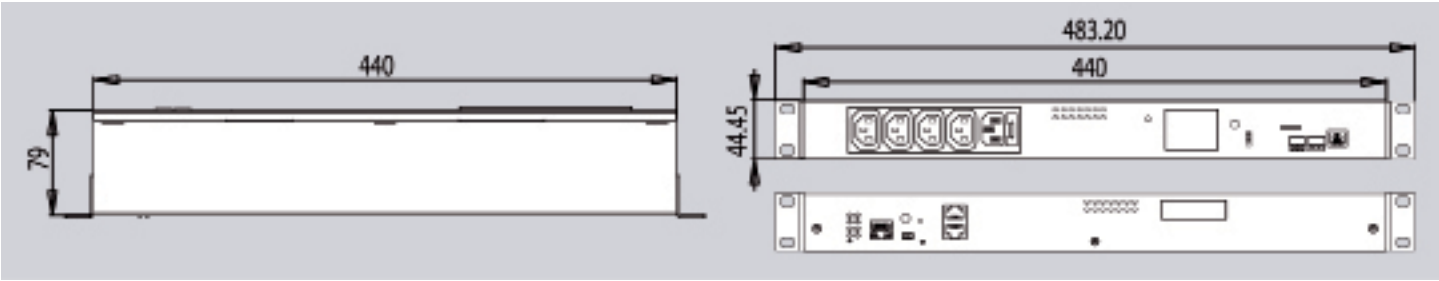
Processor	ARM926EJ 300MHz
Operating system	Linux 3.10.32
ROM	512 Mbit NAND Flash
RAM	64 Mb
Inputs	x2 AutoSense RJ-12 ports x2 dry contact inputs CAN port for digital sensors Power inlet C14 (10A fuse)
Outputs	x4 C13 outlets x2 12V 0.25A outputs
LED status indicators	Power, Network, Relays, Error, CAN, 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	Min. -10° 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

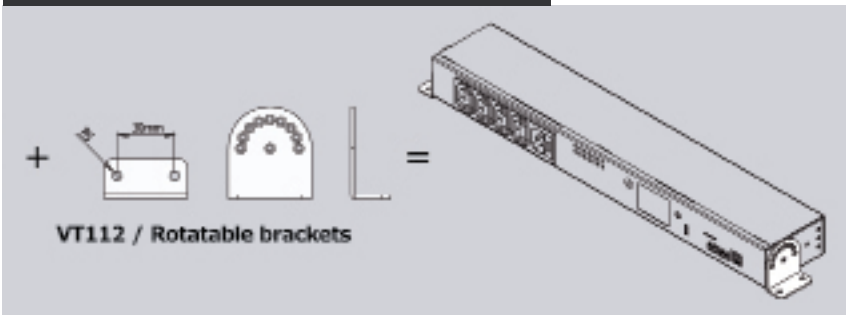
Connection example



Dimensions



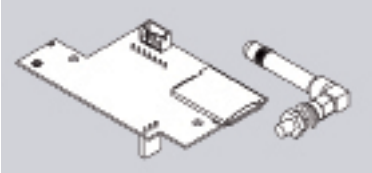
Accessories (ordered separately)



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.

Comparison table: Monitoring Units

Remote Control	VT900	VT960	VT825	VT805	VT335	VT325
Device Management: Web, SNMP, manually via SMS	■	■	■	■	■	■

Interface	VT900	VT960	VT825	VT805	VT335	VT325
Interface: Access via any Internet browser.	■	■	■	■	■	■
LAN: Ethernet 10/100 Mbit	■	■	■	■	■	■
OS: Linux	v.4.14	v.4.14	v.3.10	v.3.10	v.3.10	v.3.10
RAM:	1Gb	1Gb	64Mb	64Mb	64Mb	64Mb
CPU speed:	1 Ghz	1 Ghz	300mHz	300mHz	300mHz	300mHz
Clock: Built-in clock with time synchronization	■	■	■	■	■	■
Watchdog: Built-in watchdog timer	■	■	■	■	■	■
Max. amount of sensors: physical sensors, dry contacts, relays	288	208	84	80	74	6
Max. amount of elements: notifications, triggeres, timers, logics, sensors, dry contacts	1000	1000	200	200	200	200

Protocol support	VT900	VT960	VT825	VT805	VT335	VT325
Network protocols: DHCP; HTTP; HTTPS; DynDNS; SSL; SNMP v1, v2c, v3; SMTP; FTP; Syslog; OpenVPN, RADIUS;	■	■	■	■	■	■
Network protocols: SSH	■	■	□	□	□	□

Alerts / Notifications	VT900	VT960	VT825	VT805	VT335	VT325
Alert types: E-mail, FTP log, Syslog, SMTP or SNMP, SMS (Modem is ordered separately), Web-to-SMS	■	■	■	■	■	■
Max. number of "mail to" recipients in an E-mail notification	100	100	10	10	10	10
Max. number of "SMS to" recipients in an SMS notification	100	100	10	10	10	10

Virtual sensors	VT900	VT960	VT825	VT805	VT335	VT325
Pings: Built-in function for server pinging. Test the reach-ability of a hosts an a network.	■	■	■	■	■	■
IP cameras: Connect up to x4 cameras	■	■	■	■	■	■
Get SNMP: Read data from external equipment via SNMP PDU GET (v2c)	■	■	■	■	■	■
User keys: Add users who have access using RFID reader.	■	■	■	■	■	■
Logic schemes: Used to specify automatic actions to events that occur in the system.	■	■	■	■	■	■
Timers: Allows you to plan the events in the system.	■	■	■	■	■	■
Triggers: Generate events in the system if logic is triggered.	■	■	■	■	■	■

LED indication	VT900	VT960	VT825	VT805	VT335	VT325
LEDs: ACT (green), ERR (red), E1 (yellow), E2 (yellow), CAN (green)	■	■	■	■	■	■
LEDs: HDD (green)	■	■	□	□	□	□
LEDs: R1, R2	■	■	♦	□	□	□

Video	VT900	VT960	VT825	VT805	VT335	VT325
Video cameras:	AV, USB, x4 IP	AV, USB, x4 IP	USB, x4 IP	USB, x4 IP	USB, x4 IP	USB, x4 IP
Video power supply: DC 12V 0,25A for analog camera	■	■	□	□	□	□

■ Built-in □ None ♦ Extendable ◊ Not extendable ☼ Special order

Comparison table: Monitoring Units

Power	VT900	VT960	VT825	VT805	VT335	VT325
Power input AC/DC:	90-230V (VT900)	90-230V (VT960)	90-230V (VT825)	+12V	+12V (VT335)	+12V
Power input DC/DC:	48V (VT-900DC)	48V (VT-960DC)	24 - 48V (V825DC)	24 - 48V	24 - 48V (VT335DC)	□
Fuse: Fuse at the inlet	2A	2A	1A	□	□	□
Max. power consumption:	30W	30W	10W	10W	10W	6W
The maximum current load on the relay:	10A	10A	10A	250mA	250mA	250mA
Power reservation: 12V, built-in voltage monitor, voltage range 9-12.6V.	□	□	■	□	□	□

Outputs	VT900	VT960	VT825	VT805	VT335	VT325
Relay outputs: latching relays 240V*10A	2	2	2	□	□	□
Relays outputs: 12V 0.25A	2	2	2	2	2	2
Max. dry contact outputs: with VTX40 extension	8	24	□	□	□	□
Audio output: AV OUT	1	1	□	□	□	□
Video output: AV OUT	1	1	□	□	□	□

Inputs	VT900	VT960	VT825	VT805	VT335	VT325
Analog port: 6P6C for connection of any analog sensor.	8	8	8	8	4	2
CAN BUS port: 6P6C port for connection. Max. number of devices:	20	20	8	8	8	□
Dry contact inputs:	16	16	4	4	4	□
Max. dry contact Inputs: Possible with extensions	36	100	12	4	4	2
Audio input: AV IN	1	1	□	□	□	□
Video input: AV IN	1	1	□	□	□	□
1-Wire extension VT10: Needed for connection of 1-Wire sensors or RFID reader.	1	1	12	♦	♦	♦

Other connectors	VT900	VT960	VT825	VT805	VT335	VT325
Ethernet port: 10/100Mbit	■	■	■	■	■	■
USB 2.0 Type A: (for USB camera or flash drive)	1	1	□	□	□	□
USB 2.0 Mini A: (for USB camera or flash drive)	1	1	1	1	1	1
Restart button: restarts the device	■	■	■	■	■	■
Switch Normal / Recovery: returns the device to factory settings	□	□	■	■	■	■
FEL button: softly restarts SATA drive	■	■	□	□	□	□
Shutdown button: Softly shuts down the device.	■	■	□	□	□	□

External Memory	VT900	VT960	VT825	VT805	VT335	VT325
SD card slot: SD \ HC memory cards up to and inclusive 32Gb. Max. file length 24 hours. Max. number of files is 10,000. Export of files using web interface is possible.	■	■	■	■	□	□
SATA Drive: 2.5" HDD or SSD (ordered separately)	♦	♦	◊	◊	◊	◊

■ Built-in □ None ● Extension ○ Not extendable

Monitoring Units & PDUs Comparison tables

Extensions (modules are ordered separately)	**VT900**	**VT960**	**VT825**	**VT805**	**VT335**	**VT325**
VT10: 1-Wire board for connecting 1-Wire sensors or RFID reader	1	1	♦	♦	♦	♦
VT18: adds x8 dry contacts inputs, x2 loads (latching relays with LEDs indicators) & x1 12V DC power backup terminal.	◊	◊	♦	◊	◊	◊
VTX16: x16 dry contact inputs	♦	♦	◊	◊	◊	◊
VTX40a, VTX40b, VTX40c: Each board has x32 dry contact inputs, x8 dry contact outputs.	Bank A	Bank A, B, C	◊	◊	◊	◊
SATA: 2.5" HDD or SSD (ordered separately)	♦	♦	◊	◊	◊	◊

Modem (extensions)	**VT900**	**VT960**	**VT825**	**VT805**	**VT335**	**VT325**
4G LTE modem: VT710, VT760 are ordered separately. Includes only one LTE antenna. **Additional extension include:** • **VT6624 / LTE antenna 3dB:** Makes 4G signal more stable • **VT6691 / GPS antenna 3m 3dBi:** Needed for correct time by geographic location	VT710	VT710	VT760	VT760	VT760	USB
2G GSM modem: VT710, VT700 are ordered separately	VT710	VT710	VT700	VT700	VT700	USB
Modem modes:	**Router** / Access	**Router** / Access	Access	Access	Access	Access

Environmental characteristics	**VT900**	**VT960**	**VT825**	**VT805**	**VT335**	**VT325**
Operating temperature: 0 to 70 °C	■	■	■	■	■	■
Storage temperature: –25 to 85 °C	■	■	■	■	■	■
Operating humidity: 0 to 90 %, non-condensing	■	■	■	■	■	■
Storage humidity: 0 to 95 %, non-condensing	■	■	■	■	■	■

Other Features	**VT900**	**VT960**	**VT825**	**VT805**	**VT335**	**VT325**
Installation:	19" 1U	2HU 19"	19" 1U	Desktop	Desktop	Desktop
Dimensions (L x H x D) in mm:	440*44*80	440*88*80	440*44*80	200*44*80	180*35*80	95*35*80
Weight:	2 kg	3 kg	1,5 kg	1,0 kg	0,7 kg	0,4 kg
External chassis grounding: M4 thread	■	■	■	■	■	■

Web interface (general)	**VT900**	**VT960**	**VT825**	**VT805**	**VT335**	**VT325**
Access: Three-tier data access with login	■	■	■	■	■	■
Multi language: Easy to add new language	■	■	■	■	■	■
Sensor graphing:	■	■	■	■	■	■
Sensor thresholds: Low alarm, low warning, normal, high warning, high alarm	■	■	■	■	■	■
Data export: XML, CSV, TXT logs, system settings	■	■	■	■	■	■
First time wizard: Language, Time, Network, SNMP, Users	■	■	■	■	■	■

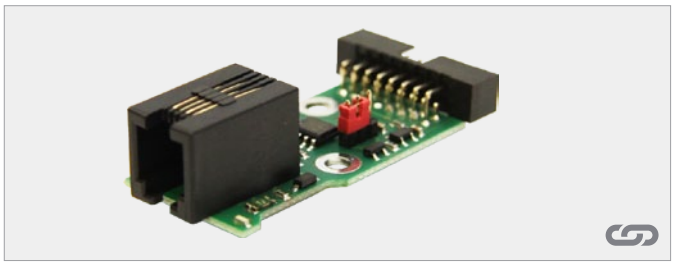
■ Built-in □ None ● Extension ○ Not extendable ♦ Special order

Monitoring Units & PDUs Comparison tables

Web interface (panels)	VT900	VT960	VT825	VT805	VT335	VT325
Dashboard:	■	■	■	■	■	■
System tree: sensors and devices displayed in a hierarchy	■	■	■	■	■	■
Dry contact inputs:	■	■	■	■	■	■
Dry contact outputs:	■	■	□	□	□	□
Event log:	**500 logs**	**500 logs**	200	200	200	200
Logic schemes:	■	■	■	■	■	■
Cameras:	■	■	■	■	■	■
Map:	■	■	■	■	■	■
Users: three level hierarchy (read / write)	■	■	■	■	■	■
Access control:	■	■	■	■	■	■
CAN configuration:	■	■	■	■	■	■
Multi graphs: display multiple sensors on a single graph	■	■	■	■	■	■

■ Built-in □ None ● Extension ○ Not extendable

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.

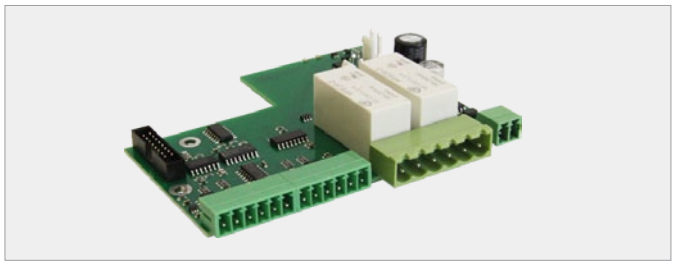
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Network Interface	1-Wire
Status Indicators	1-Wire status LED
Max. distance	100 m
Package includes	2 screws M3x5, Cable BH2-16M to BH2-16M

VT11 / Dry contact output

Switchable contact. Can be used together with equipment, for example for switching ON/OFF air conditioners.

Can be connected to units that have alarm outputs 12V.

Input	Two wire terminal pins 3.81mm
Output	Two wire terminal pins 5.08mm
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min. -10° C, Max.80°C
Max. distance	200 m
Dimensions	60 x 18 x 18 mm
Weight	60 g

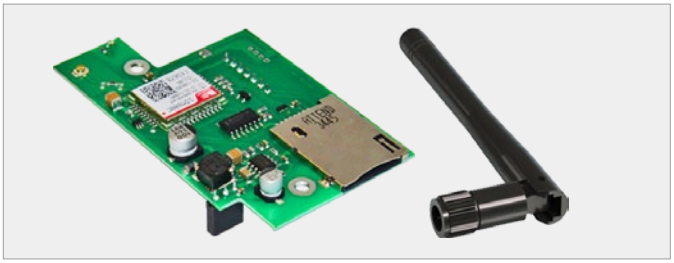


Dimensions	83 x 96 x 26 mm
Weight	56 g
Inputs	x8 dry contacts inputs, 12V power backup

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

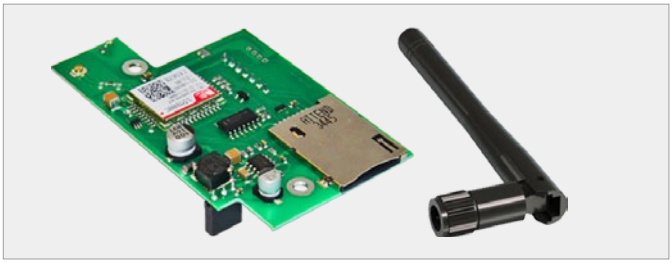


VT700 / GSM modem

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.

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)

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

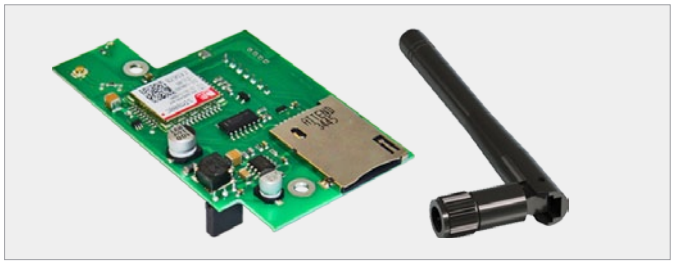


VT710 / Internal LTE, GPS modem

LTE, GPS modem/router. Used with VT900, VT900 DC, VT960, VT960 DC. Provides ethernet over LTE. Allows sending and receiving messages. Additional GPS VT6691 and LTE VT6624 antennas are ordered separately.

Dimensions	60 x 45 x 15 mm
Weight	60 g
Outputs	GSM/GPRS/EDGE 900/1800 MHz
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Extension protocols	FDD-LTE B1/B3/B5/B7/B8/B20
Mounting	Mounted inside monitoring unit using x3 screws M3*5
Status Indicators	Red / Green Led
Special Features	Uplink up to 5Mbps - Downlink up to 10Mbps
Device management	AT commands
Package includes	Screws, Cable BH2-16M to BH2-16M, x1 LTE antenna

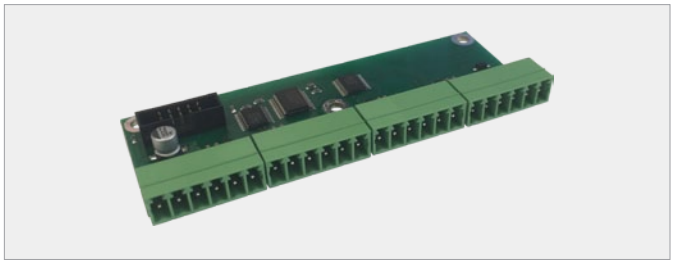


VT760 / Internal LTE, GPS modem

Can be built in inside VT335 DC monitoring unit. Adds 4G LTE, GPS connection. Power-cycling is embedded function. Additional GPS VT6691 and LTE VT6624 antennas are ordered separately.

Dimensions	60 x 55 x 15 mm
Weight	60 g
Outputs	GSM/GPRS/EDGE 900/1800 MHz
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Extension protocols	FDD-LTE B1/B3/B5/B7/B8/B20
Mounting	Mounted inside monitoring unit using x3 screws M3*5
Status Indicators	Red / Green Led
Special Features	Uplink up to 5Mbps - Downlink up to 10Mbps
Device management	AT commands
Package includes	Screws, Cable BH2-16M to BH2-16M, x1 LTE antenna

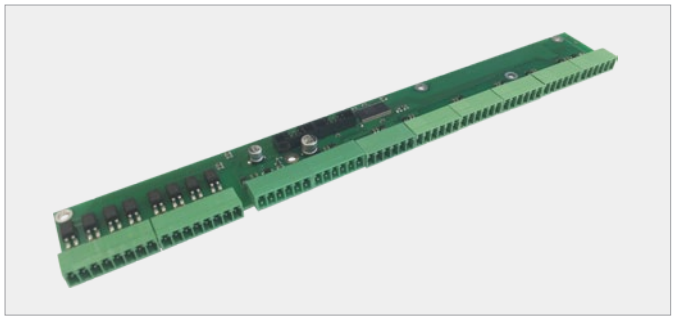


VTX16/ Dry contacts board

Device mounted and connected inside of VT900, VT900 DC, VT960, VT960 DC master units. 2-wire interface has 16 dry contact inputs. Adds to contacts to bank A. Can be used together with any contacts, for example doors, windows, fire-alarms, burglar alarms, power systems, circuit breakers, exit / push buttons and etc.

Inputs	x16 dry contact inputs
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min. -10° C - Max.80° C
Network Interface	2-wire
Device management	Web-interface has "Dry contacts" panel

HS code	8531 10 300
Dimensions	89 x 35 x 11 mm
Weight	42 g
Mounting	Installed inside 900 & 960 unit
Package includes	BH-10 bus cable, x4 terminals (6P 3.5mm), 3 screws

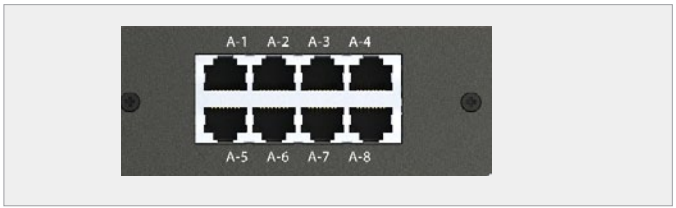


VTX40a/ Dry contacts board (Bank A)
VTX40b/ Dry contacts board (Bank B)
VTX40c/ Dry contacts board (Bank C)

Device mounted and connected inside of VT900, VT900 DC, VT960, VT960 DC master units. 2-wire interface has x32 dry contact inputs & x8 dry contact outputs. Can be used together with any contacts, for example doors, windows, fire-alarms, burglar alarms, power systems, circuit breakers, exit / push buttons and etc.

Inputs	x32 dry contact inputs x8 isolated dry contact outputs
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Operating temperature	Min. -10° C - Max.80° C
Network Interface	2-wire
Device management	Web-interface has "Dry contacts" panel

HS code	8531 10 300
Dimensions	89 x 35 x 11 mm
Weight	120 g
Mounting	Installed inside 900 & 960 unit
Package includes	BH-10 bus cable, x4 terminals (6P 3.5mm), 3 screws



VT408 / Extension unit

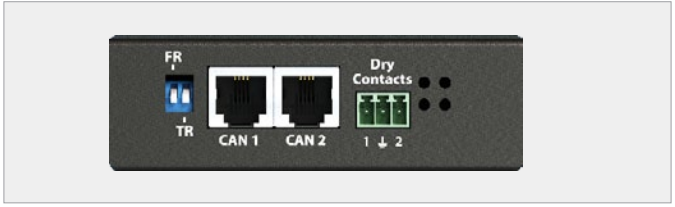
Allows to increase the quantity of sensors connected to any Vutlan monitoring unit. Adds up to 8 analog sensors.

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

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).

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)

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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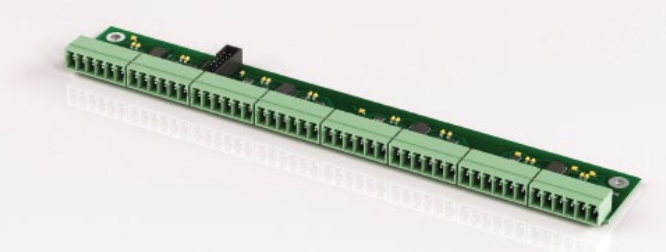


VT32 / Dry contacts board

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	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

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,

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.

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

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

VT470 / PIR, vibration & temperature sensor

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

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

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

VT490 / Humidity & temperature sensor

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

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

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

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

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.

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

VT550 / Wind velocity meter

At installation on Air conditioners, fans, etc., sensor controls airflow 0 - 3 m/s. Max. distance from the monitoring unit is 50 meters.

Dimensions	60×18×18 mm
Weight	106 g
Inputs	Analog sensor port, RJ9, 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	50 m
Special features	Response time 0.1 sec
Package includes	Sensor converter, airflow sensor, mounting bracket, 2m RJ11/RJ12 cable, screws, nuts, bolts and a sticker.
Other	Sensor is sold with preconfigured sensitivity.

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

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.

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)

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

VT591 / Water leakage 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.

Requires:

Water leakage cable WLC is supplied separately.

Water detection rope WDC is supplied separately.

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	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

WLC / Water leak cable

When water is in contact with leak cable, sensor indicates the emergence of moisture. After the flooding easily dries out by itself. Max. distance from the unit is 225 meters. can work in high humidity, pollution and hazardous waste. Recommended to use with salted or dust water, acids, alkalys, high humidity or near dew point.

Order options:
WDC6 - 6 meters
WDC10 - 10 meters
WDC 25 - 25 meters
WDC 50 - 50 meters
Custom length possible.

Requires: VT591 / Water leakage sensor (ordered separately!)

Dimensions	Ø5.5 mm
Weight	26 g/m
Inputs	two wire connectors
Operating temperature	Min. -50 °C, Max. +105 °C
Operating humidity	Humidity: 0-100%
Max. distance from unit	225 m
Response time	15 s
Detectable liquids	Clean, polluted & distilled water; acids; alkalis; alcohols and other electrically conductive liquid, Conductors - Ni/Cu
Conductor	27% Ni
Package includes	One self-adhesive holder for each 2m of cable.

Dimensions	Ø3 mm
Weight	15 g/m
Inputs	two wire connector
Operating temperature	Min. -50 °C, Max. +105 °C
Max. distance from unit	225 m
Response time	15 s
Detectable liquids	Clean, polluted & distilled water; acids; alkalis; alcohols and other electrically conductive liquid, Conductors - Ni/Cu
Conductor	27% Ni

WDC / Water detection rope

When water is in contact with detection rope, sensor indicates the emergence of moisture. Can work until the dew point and does not welcome pollution! Max. distance from the unit is 225 meters. After the flooding, the leak detection cable can be dried and re-used. Recommended to use only for the detection of spirits, pure and distilled water!

Order options:
WDC6 - 6 meters
WDC10 - 10 meters
WDC 25 - 25 meters
WDC 50 - 50 meters
Custom length possible.

Requires: VT591 / Water leakage sensor (ordered separately!)

VT406 / DC HOS sensor transducer

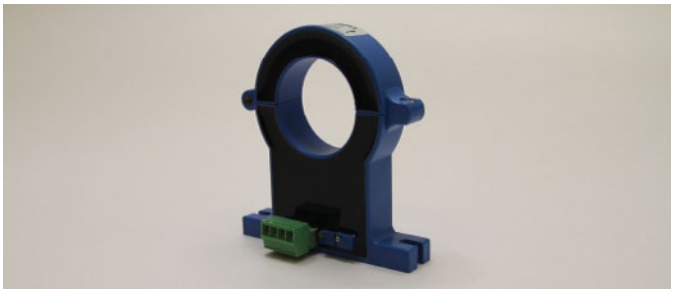
is used together with HOS-100Q1 DC hall current sensors and converting data into format of IP monitoring system. The system interface allows you to assign the current meter and to introduce the function data conversion.

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

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

+



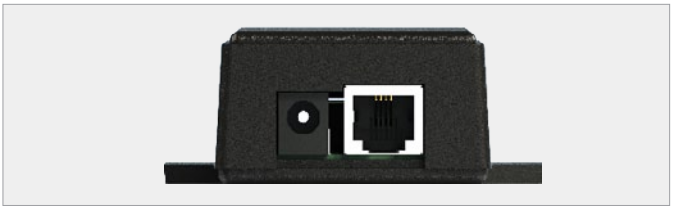
HOS-100Q1 / DC current sensor

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	Min. -10 °C, Max. +80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	-12V / +12V
Outputs	4 pin terminal



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.

Dimensions	68 × 47 x 26 mm
Weight	160 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	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

+

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.

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
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)

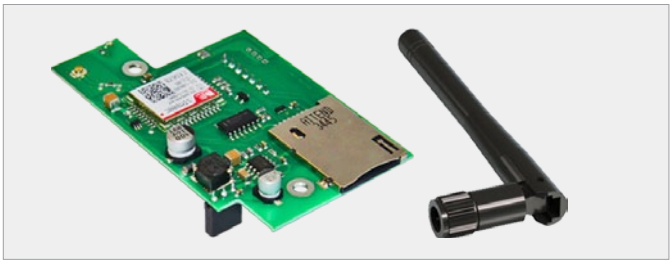
Mounting	Mounting bracket included
Power Consumption	100 mW
Max. distance from unit	50 m
Special features	Isolation:1 kV, Measured current: 4 ... 20 mA, Accuracy: 2%
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, terminal plug 2 pins 5mm

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)

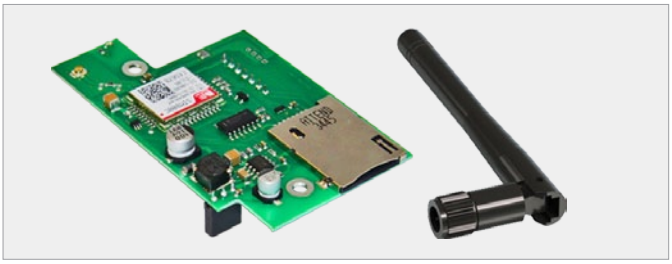


VT700 / Internal GSM modem

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.

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)

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

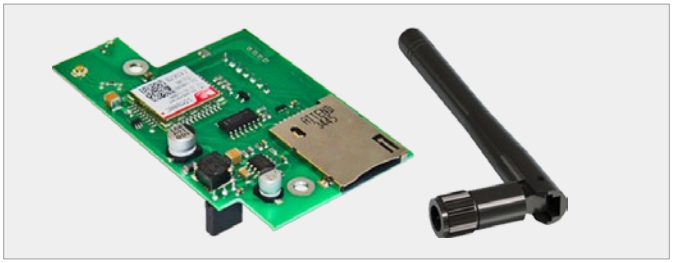


VT710 / Internal LTE, GPS modem

LTE, GPS modem/router. Used with VT900, VT900 DC, VT960, VT960 DC. Provides ethernet over LTE. Allows sending and receiving messages. Additional GPS VT6691 and LTE VT6624 antennas are ordered separately.

Dimensions	60 x 45 x 15 mm
Weight	60 g
Outputs	GSM/GPRS/EDGE 900/1800 MHz
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Extension protocols	FDD-LTE B1/B3/B5/B7/B8/B20
Mounting	Mounted inside monitoring unit using x3 screws M3*5
Status Indicators	Red / Green Led
Special Features	Uplink up to 5Mbps - Downlink up to 10Mbps
Device management	AT commands
Package includes	Screws, Cable BH2-16M to BH2-16M, x1 LTE antenna



VT760 / Internal LTE, GPS modem

Can be built in inside VT335 DC monitoring unit. Adds 4G LTE, GPS connection. Power-cycling is embedded function. Additional GPS VT6691 and LTE VT6624 antennas are ordered separately.

Dimensions	60 x 55 x 15 mm
Weight	60 g
Outputs	GSM/GPRS/EDGE 900/1800 MHz
Operating temperature	Min. -10 °C, Max. 80 °C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)

Extension protocols	FDD-LTE B1/B3/B5/B7/B8/B20
Mounting	Mounted inside monitoring unit using x3 screws M3*5
Status Indicators	Red / Green Led
Special Features	Uplink up to 5Mbps - Downlink up to 10Mbps
Device management	AT commands
Package includes	Screws, Cable BH2-16M to BH2-16M, x1 LTE antenna

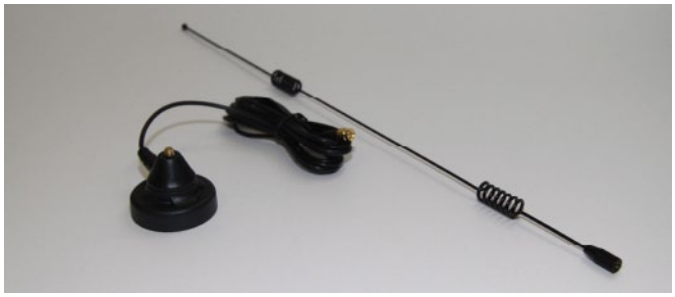
VT6603 / GSM antenna 5m

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

Beam pattern - omnidirectional.

Dimensions	Size Ø28 x 110 mm
Weight	160 g
Operating temperature	Min. -10 °C, Max. 80 °C

Mounting	Has a magnet at the bottom base
Special features	Cable: RG174 SMA, Impedance: 50Ω, Frequency: 890-960 / 1710-1890 MHz, Gain: 2.5 dBi, VSWR: ≤2.0, Polarization: vertical



VT6604 / GSM antenna 3m

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

Beam pattern - omnidirectional.

Dimensions	Size Ø50 x 520 mm
Weight	180 g
Operating temperature	Min. -10 °C, Max. 80 °C

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

VT6624 / LTE antenna 3dBi

Extra LTE antenna for main or auxiliary antenna slot of "VT710 and VT760/ LTE, GPS modem".

Storage temperature	-30°C ~ -75°C
Special features	Connector: SMA Male R/P; Frequency range: LTE; Impedance: 50Ω; Radiation: Omni; Gain: 0 ~ 3dBi; VSWR: <= 3.0; Polarization: linear;
Package includes	x1 SMA tail, x1 antenna

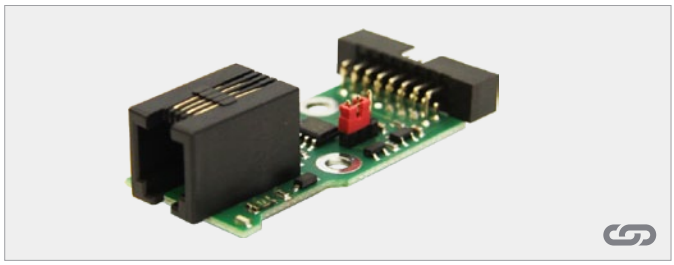
Dimensions	Size Ø12.5 x 200 mm
Weight	27 g
Operating temperature	-20°C ~ +65°C

VT6691 / GPS antenna 3m 3dBi

GPS antenna for "VT710, VT760 / LTE, GPS modem". Needed for correct time by geographic location.

Special features	Connector: SMA Male R/P; Wire: RG174 Frequency range: 1,575GHz; Bandwidth: 5MHz; Impedance: 50Ω; Radiation: Omni; Gain: 3dBi; VSWR: <= 3.0; Polarization: RHCP;
Package includes	x1 SMA tail, x1 antenna

Dimensions	48x49x14mm; length: 3m;
Weight	70 g
Operating temperature	-40...85°C
Mounting	for ribbon cable



VT10 / 1-Wire board

Board is mounted and connected inside of VT325, VT335, VT335DC, 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 or outdoors. Chain connection is possible using MS2, MS4 splitters.

Requires 1-Wire bus installation: VT10 / 1-Wire board

Dimensions	Ø7 × 30 mm, PVC cable 15 m
Weight	340 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10 °C, Max. 80 °C

Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power consumption	60 mW
Special features	Daisy chain connection possible.

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.

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
Max. distance from unit	50 m
Package includes	Sensor, cable 2m, screws nuts bolts, mounting bracket, terminal plug 2 pins 5mm

MS2 / RJ9/RJ11 splitter

Needed for daisy chain 1-Wire connection. 2 outlets simple 1-Wire bus splitter.

Inputs	RJ9
Operating temperature	Min. -10 °C, Max. 80 °C
Network interface	1-Wire

Connection	plug-and-play
Extension protocols	1-Wire
Package includes	Sticker

MS4 / RJ9/RJ11 splitter

Needed for daisy chain 1-Wire connection. 4 outlets simple 1-Wire bus splitter.

Inputs	RJ9
Operating temperature	Min. -10 °C, Max. 80 °C
Network interface	1-Wire

Connection	plug-and-play
Extension protocols	1-Wire
Package includes	Sticker

TCS / RJ11 prolongation cable

Needed for connection of different sensors on a long distances or for 1-wire bus prolongation. Straight pin 15m RJ11 cable assembly. Cable assemblies with length 3m, 6m and 10m are possible for delivery.

Order options:
TCS3 - 3 meters
TCS6- 6 meters
TCS10 - 10 meters
TCS15 - 15 meters
Custom length possible.

Connectors	Male RJ 11 / Femail RJ11
Operating temperature	Min. -10 °C, Max. 80 °C
Network interface	1-Wire
Connection	plug-and-play
Extension protocols	1-Wire

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.

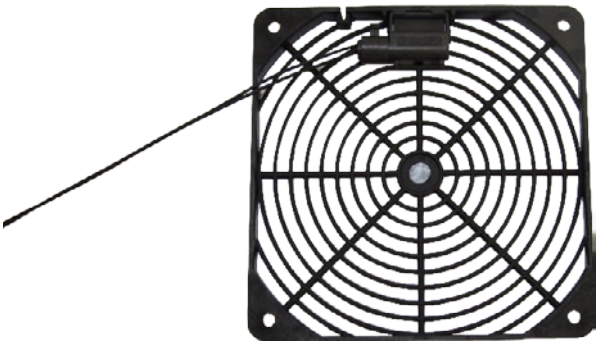
Mounting	Wall mount
Special features	Rated voltage: 12V; Current: alarm 250 mA; Sound pressure: 108 dB; Tone frequency: 3.8 kHz; Flash frequency: 2.5Hz red 150/ min; Power consumption: 250 mA; Cable: 3m;
Package includes	Device, clamps, screws

Dimensions	Ø73 x 45 mm. cable 3m
Weight	100 g
Mounting	Wall mount

VT105 / Strobe light

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

Special features	Light frequency: 1 Hz, Power consumption: 80 mA in alarm mode, Rated voltage: 12V, Current: Alarm 80 mA, Light frequency: 60 / min, Cable length: 3m
Package includes	Device,



LCF013 / Airflow sensor

At installation on fans, ventilators, etc., sensor controls air-flow: switched on / off. Connects to dry contact (IN) port.

Dimensions	34 × 17.5 × 7.5 mm
Weight	60 g
Operating temperature	Min. -10° C - Max.80° C
Special features	Response time - 10 s, Recovery time - 5 s.

VT107 / Proximity reader

Can be used with VT8xxx monitoring master units.

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

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,

+

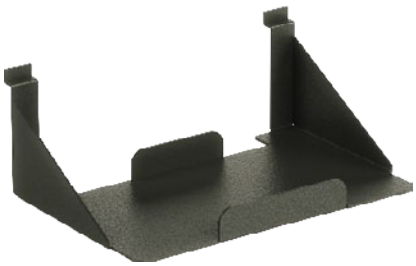
VT108 / RFID card

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,

KMS-30 / Access sensor

Access sensor, magnet.



VT101 / Battery holder

Used like backup battery holder. Can be attached to VT825 enclosure.

Dimensions	112 x 62 x 44 mm
Weight	100 g
Special features	Backup battery max. dimensions - 110 x 60 mm

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.

19" holder

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

Order options:	
VT102a	for VT335
VT122	for VT335 DC

VT111 / 19" holder

Holder / bracket for VT805 monitoring unit. 1U rack mount, 19".

VT112 / Rotatable mounting brackets

Package includes 2 brackets which allow to mount monitoring systems horizontally, vertically or at an angle on the wall, inside a rack or other. These brackets can be used with: VT325, VT335, VT805, VT825 and others.

USB100 / USB mini camera

720P mini USB Camera 2.0&1.1 UVC, 1.0 megapixel. USB UVC/MJPEG digital camera with high resolution.

Inputs	HS USB
Mounting	Wall mount

USB100 / USB dome camera

720P HD Dome USB IR Camera 2.0&1.1 UVC, 1.0 megapixel. USB UVC/MJPEG digital camera with high resolution and with IR Leds.

Inputs	HS USB
Mounting	Wall mount

USB258 / USB bullet camera

480P HD Bullet USB IR Camera 2.0&1.1 UVC, 0.3 megapixel, water resistent. Water resistent USB UVC/MJPEG digital bullet camera with IR leds.

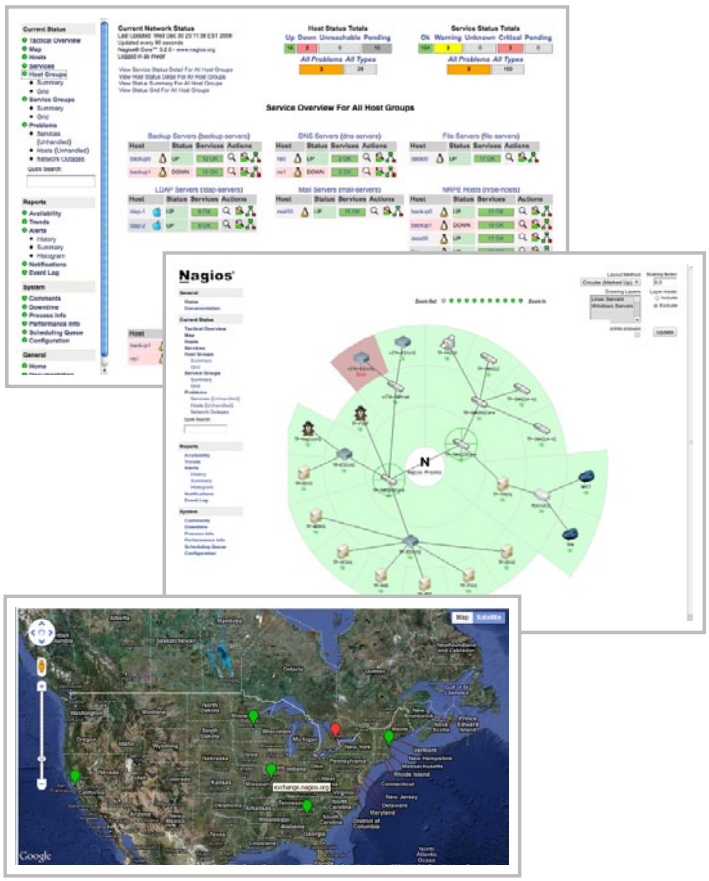
Inputs	HS USB
Mounting	Wall mount

Inputs	RJ11 - RJ11

RJS / RJ11 RJ11 sensor cable

Needed for connection of different sensors on a long distances or for 1-wire bus prolongation. Straight pin RJ11 cable assembly.

Order options:
RJS5 - 5 meters
RJS7 - 7 meters
RJS10 - 10 meters
RJS15 - 15 meters
RJS20 - 20 meters
Custom length possible.



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.

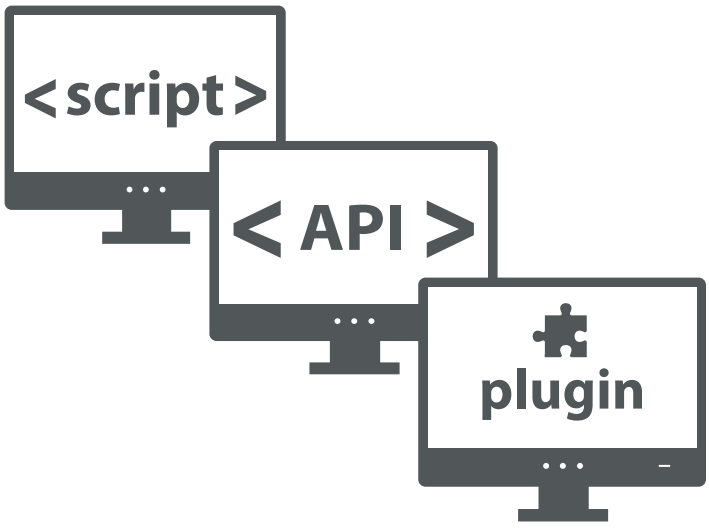
Complete monitoring and alerting for servers, switches, applications, and services.

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

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

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

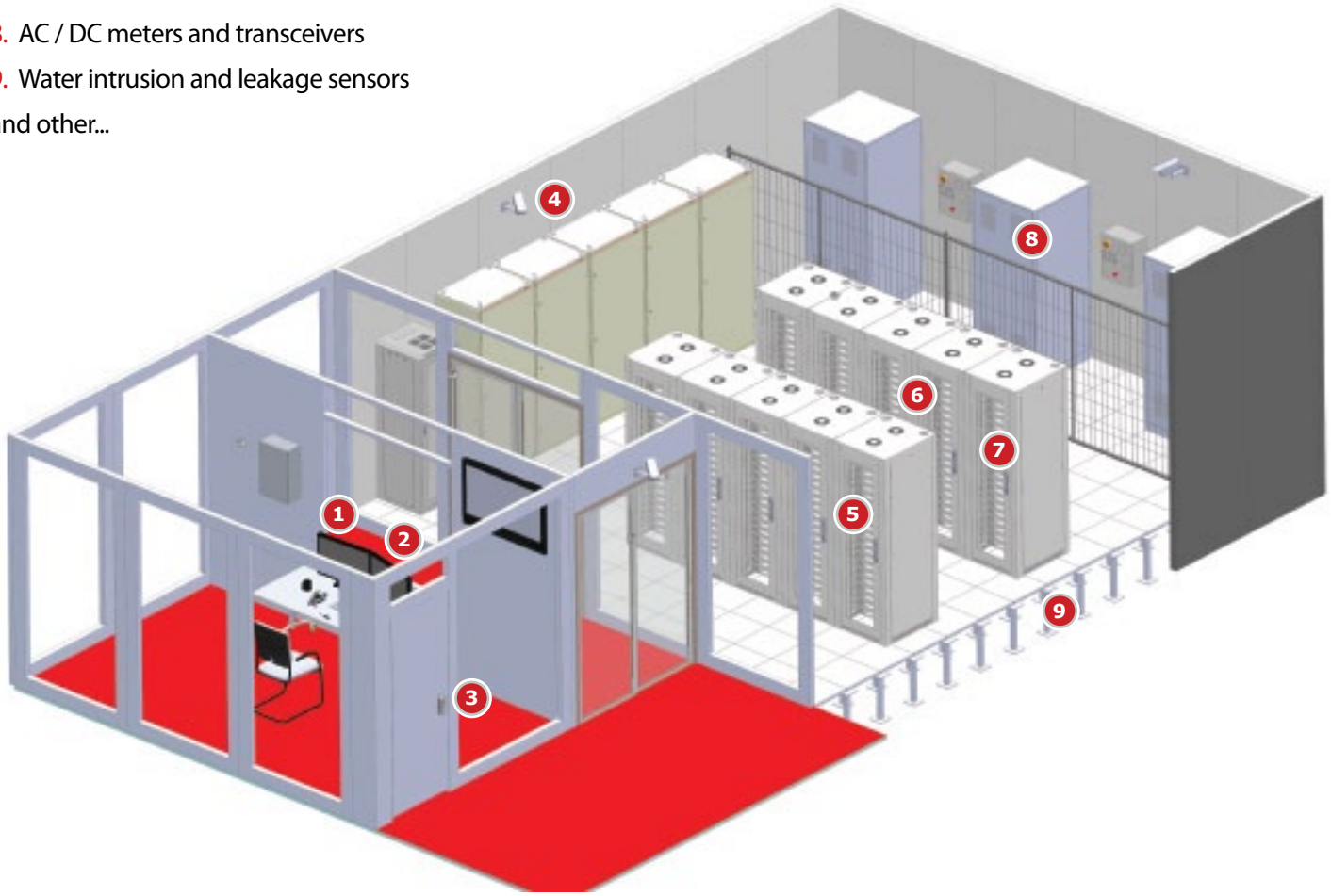
VT520 is needed for measurement of AC 90-250V.

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
8. AC / DC meters and transceivers
9. Water intrusion and leakage sensors

and other...

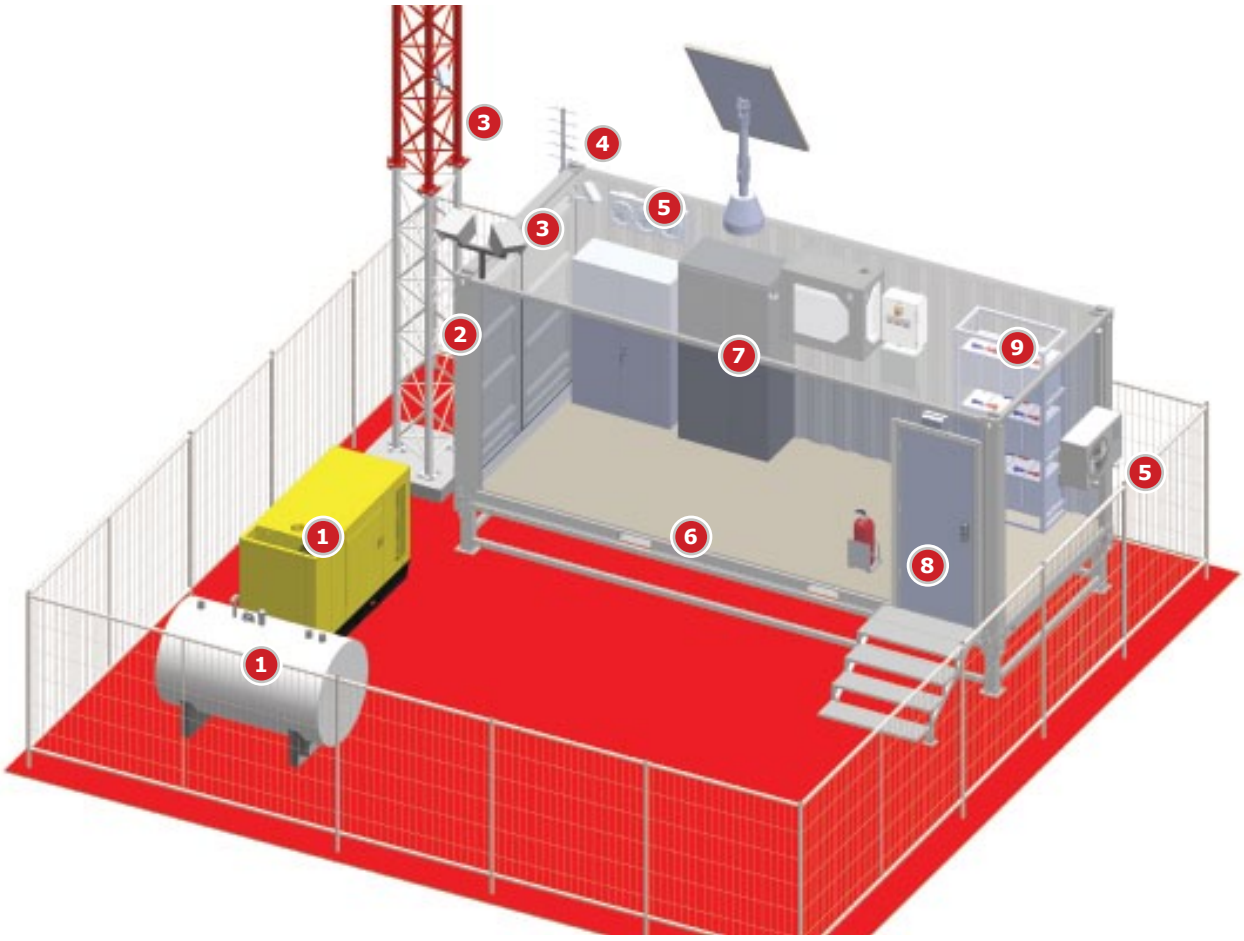


Telecommunication BTS Site Solution

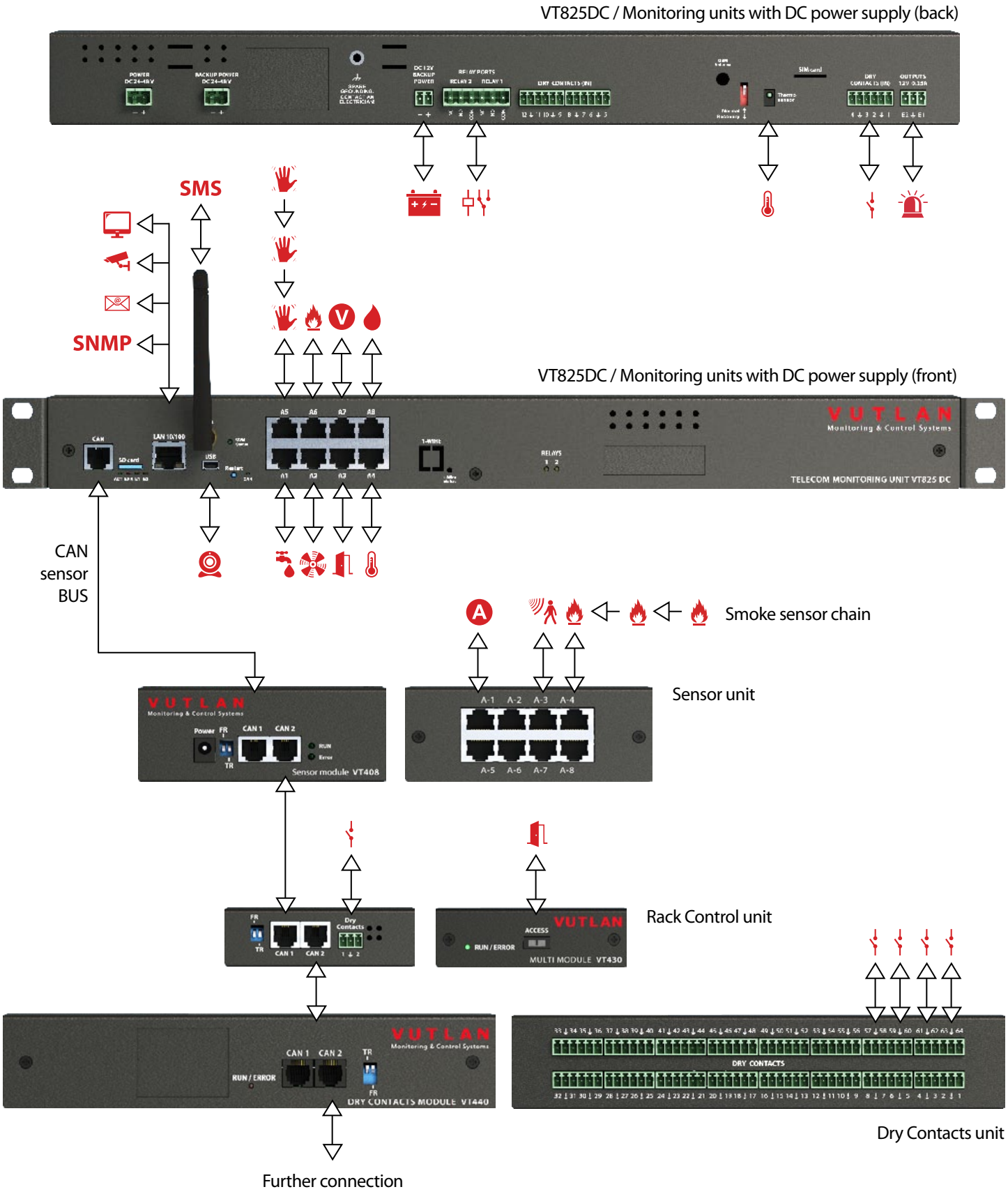
Using Vutlan monitoring and control solutions for remote BTS sites (Cell sites), helps to meet two main challenges: efficiency and security. Our monitoring units provide the Network Operation Center information about key parameters regarding the condition of the site in real-time, help to manage maintenance 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...



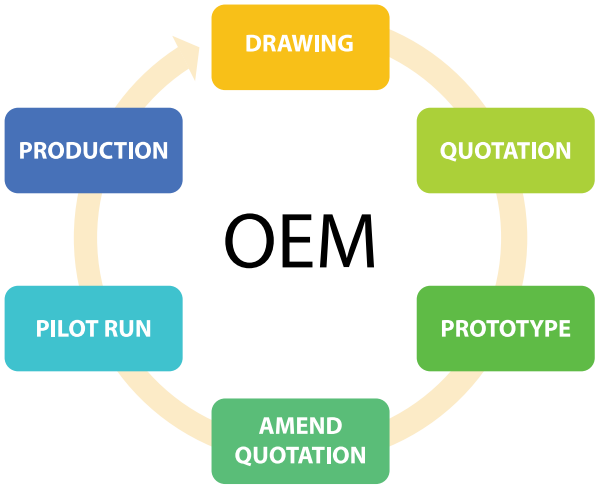
Example connection diagram

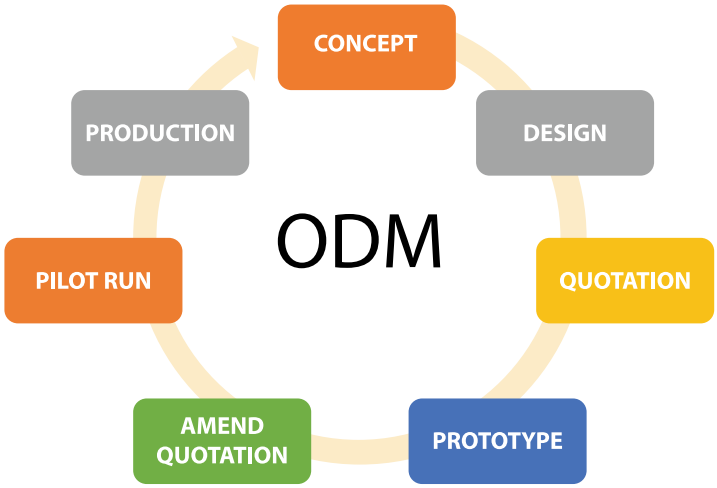


OEM / ODM manufacturing services

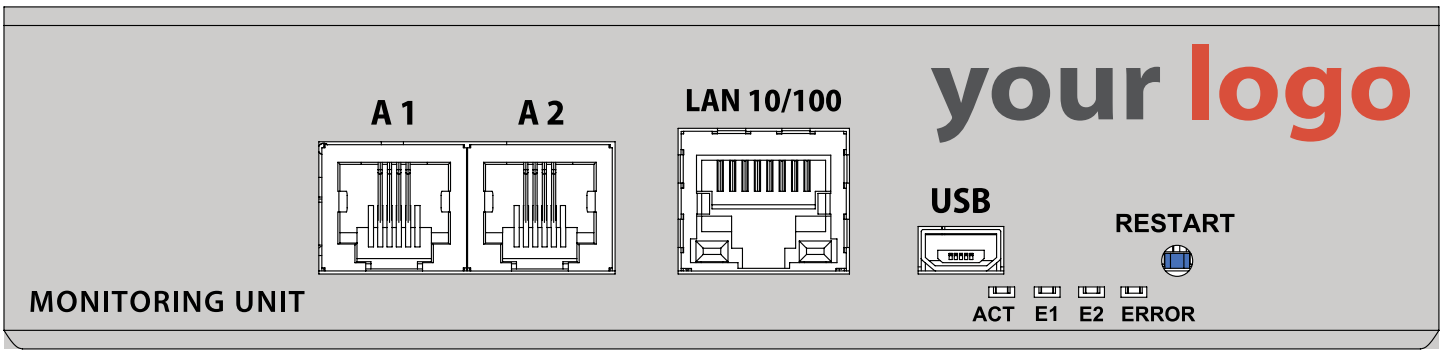
Vutlan provides OEM services to some of the major European companies from Germany, Poland, Russia and Turkey.

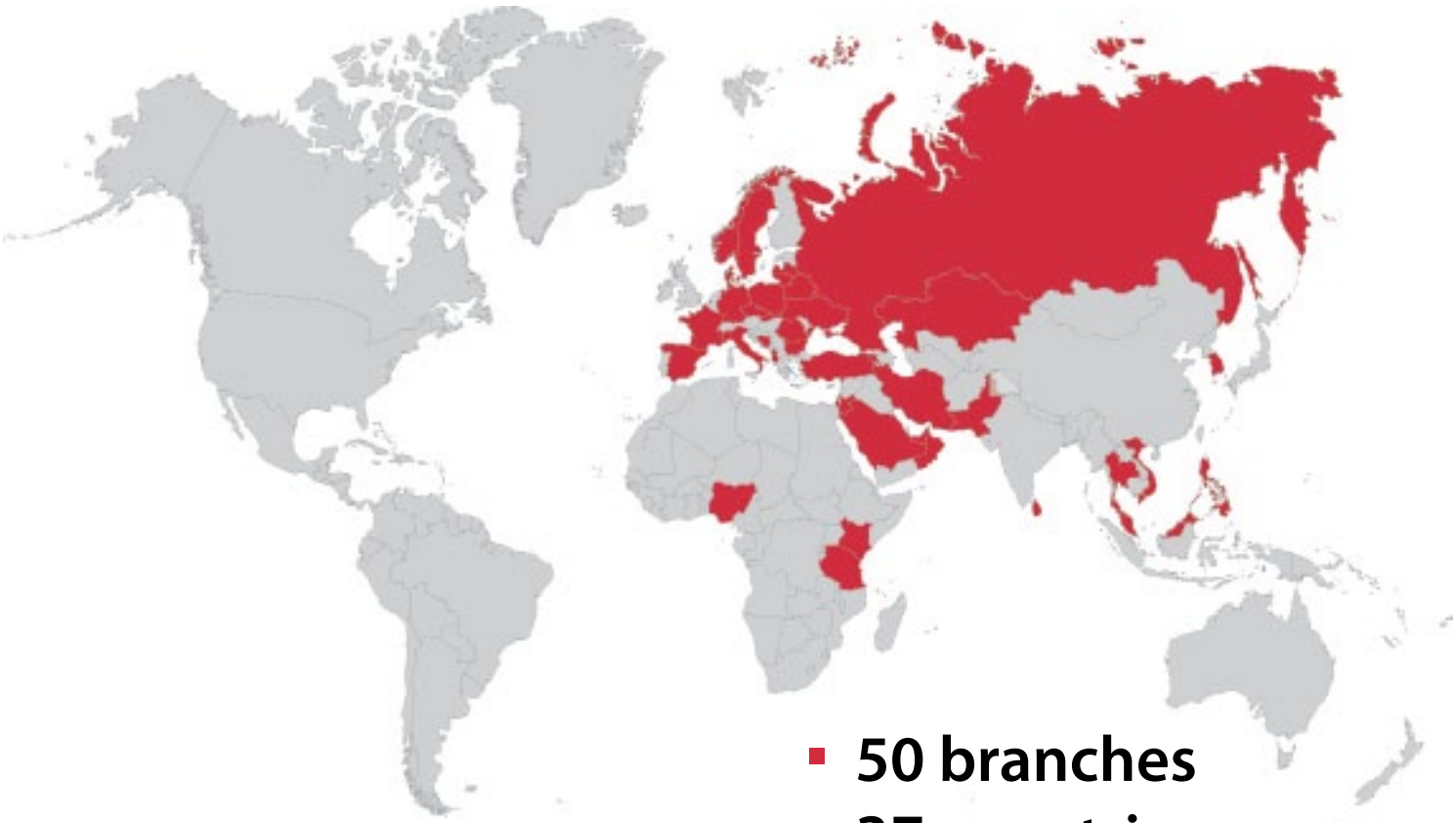
We have the experience and capabilities needed to help customers reduce their time to market, scale up manufacturing capacity and develop electronic equipment for their instrumentation. Our OEM and end customer projects range from applications in remote site management, power monitoring, data center cabinet access control, enterprise access control and time and attendance to highly custom multi-function industrial, oil and gas and security solutions.





"Professional ODM Partner to **Design** **Customize** **Manufacture** *electronic equipment"*





- **50 branches**
- **37 countries**

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