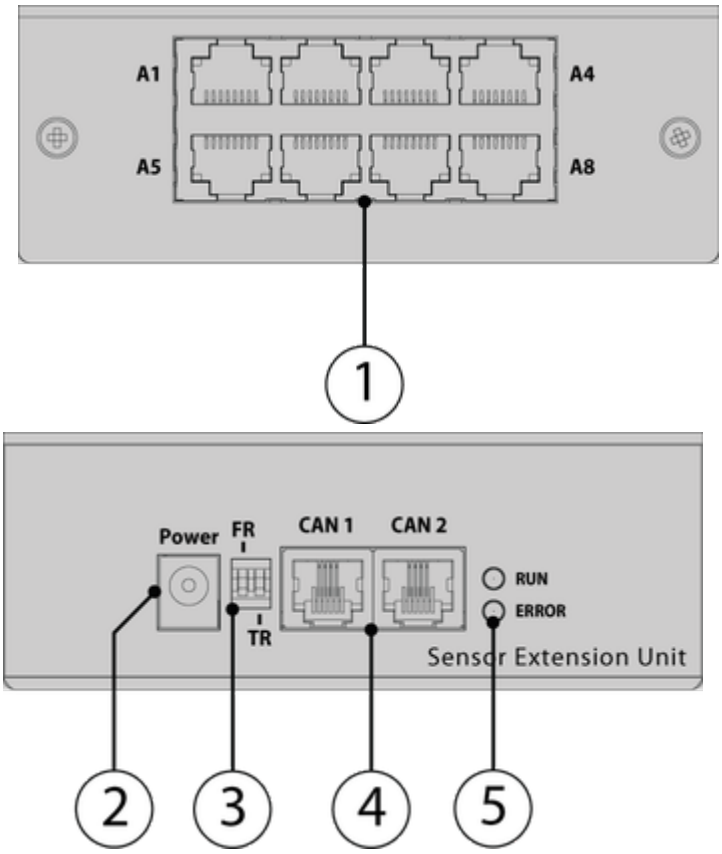
VT408 / Extension unit

The unit can be found on our official website at: VT408 / Sensor extension unit

Physical description

Module VT408 is designed to expand the number of analog sensors connected to monitoring systems.



1. "**A1**..**A8**" - 8 RJ12 analog sensor inputs with auto-sensing.

2. **"Power"** - for connection of external power supply 12V. Internal input "+".

3. "**TR**" - is the nearest switch to CAN inputs. This switch should be turned "ON" on the last sensor in the CAN chain. The last sensor in long-chain with a length of more than 10 meters, terminator should be in **"OFF"** position.

"FR" - the memory switch, is necessary for reprogramming the module (the switch remote from the CAN connectors).

> Do not use DIP switch "FR" labeled "1", it should always be OFF. If this switched is turned ON, the module will turn off. This switch is only needed for programming purposes

4. "**CAN1 CAN2**" - two equivalent digital connectors RJ12 for the connection to the master module, CAN sensors, or CAN extensions on a CAN bus, with auto-sensing.

5. LEDs: "**RUN**" - indicates appliance connection status to the main module, "**ERROR**" - indicates appliance lost connection to the main module.

- ERROR is lit continuously, RUN blinks - the unit has no connection with the monitoring unit.
- ERROR is continuously lit, RUN repaid - extension unit communicates with a monitoring unit, but it is not included in the monitoring system (not configured).
- ERROR repaid, RUN lights up continuously - the extension unit is included in the work as part of a monitoring system.

Indication

The VT408 expansion module has two RUN and ERROR LEDs that show the following states:

- ERROR continuously lit, RUN flickers - the expansion module has no connection with the master module
- ERROR is continuously lit, RUN is extinguished - the expansion module has communication with the master module, but is not included in the monitoring system (not configured)
- ERROR is extinguished, RUN is continuously lit - the expansion module is included in the monitoring system

CAN setting

The extension module has a built-in element:

- Power - the element of relay
  This element, by designation, is identical to the Analog Power element of the monitoring module. It turns on or off the power of the analog sensors.
  The analog sensor power off for a few seconds is used to reset the alarm of the VT560 smoke detectors connected to the VT408 expansion module.
  Warning: when the analog sensors are powered off, all external sensors connected to the VT408 cease to function.

  The analog sensors connected to the VT408 are configured in the same way as the sensors connected to the monitoring module.

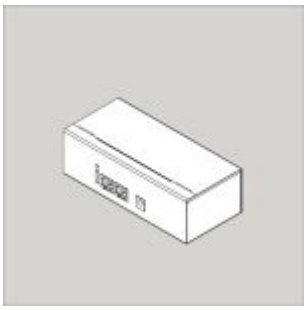
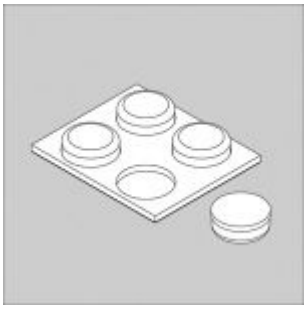
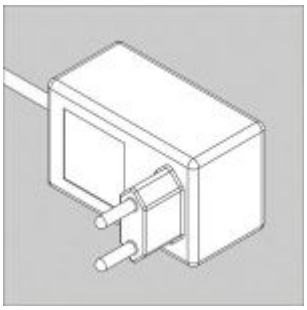
Parameters

Up to date parameters can be found on our official website at: VT408 / Sensor extension unit

1	Product dimensions	Size W 109 x H 40 x D 68 mm
2	Packaging weight	0.5 kg
3	Power input	12V DC, 05A
4	Operating temperature	Temperature: Min. -10° C - Max.+80° C
5	Mounting possibilities	VT123 / Wall mount brackets (ordered separately)VT124 / Din rail holder (ordered separately)VT125 / 19” Mounting kit for x3 units (ordered separately)
6	Max. distance from the unit	Max. bus length: 225m,Max. length of analog sensor cables: 50-150m (depends on sensor type)
7	Manufactured in (country)	Manufactured in Slovak Republic, E.U.
8	HS Code	8471 50 000
9	Package includes	Cable BH2-16M to BH2-16M Screws 2pcs M3x5
10	Brackets (accessories)	VT123 / Wall mount brackets (ordered separately)VT124 / Din rail holder (ordered separately)VT125 / 19” Mounting kit for x3 units (ordered separately)
11	Inputs terminals	Analog sensor ports: x8 ports RJ-12 ports: x2
12	Extension protocols	CAN
13	Network Interface	CAN open
14	Status Indicators	LED indication for CAN bus connection LED indication for Power / Network connectivity Red / Green Led

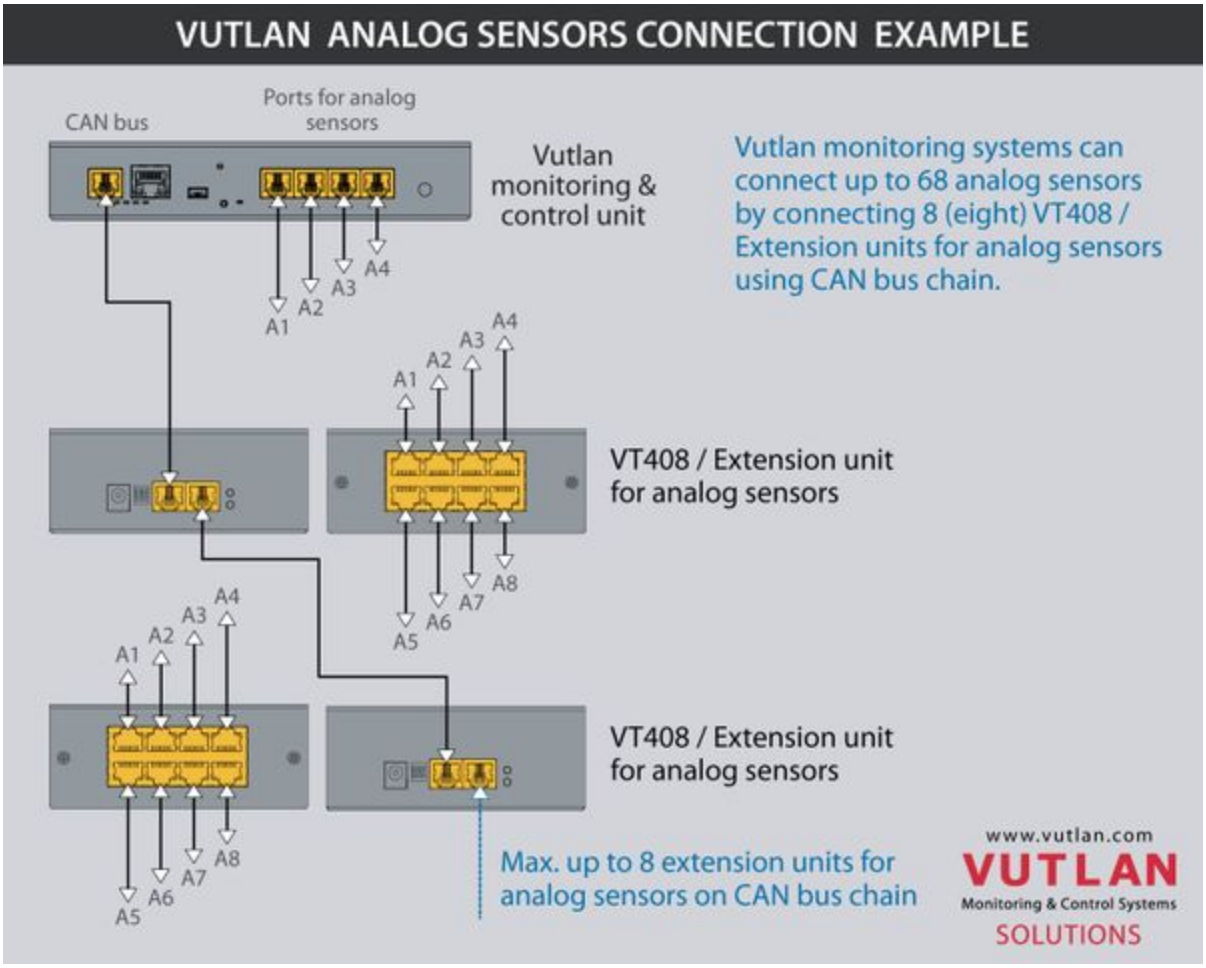
Inventory

Make sure that the contents of the delivery meet the following configuration. Report a missing or damaged component to your supplier. If damage occurred during transportation, contact the appropriate delivery service.

	Package content	Description
1		Extension unit VT408.
2		RJ11 6P4C 2m CAN cable.
3		Self-adhesive rubber feets - 4 pcs.
4		12V adapter.

Function

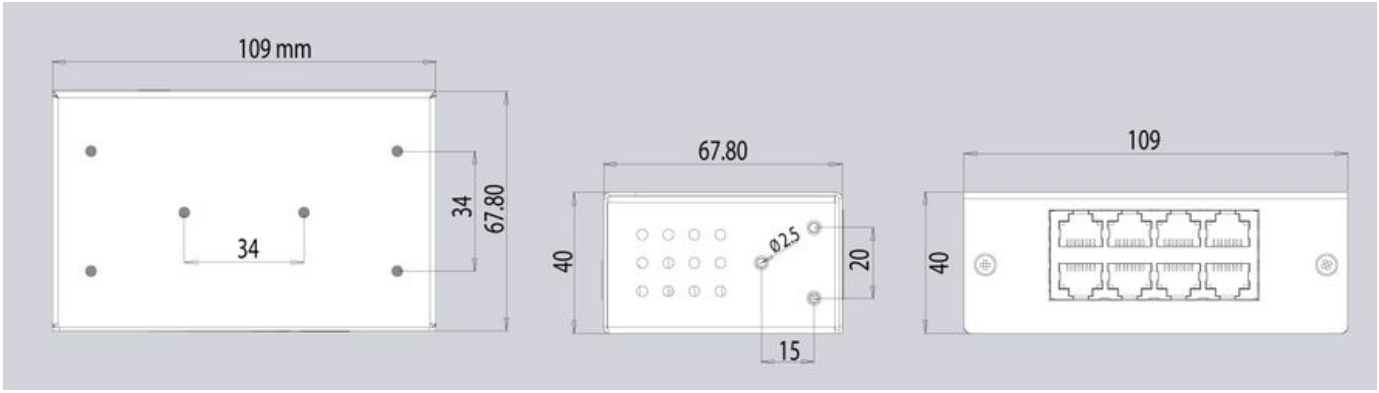
VT408 module is developed to expand the number of analog sensors connected to the monitoring system. The picture below illustrates the expansion example:

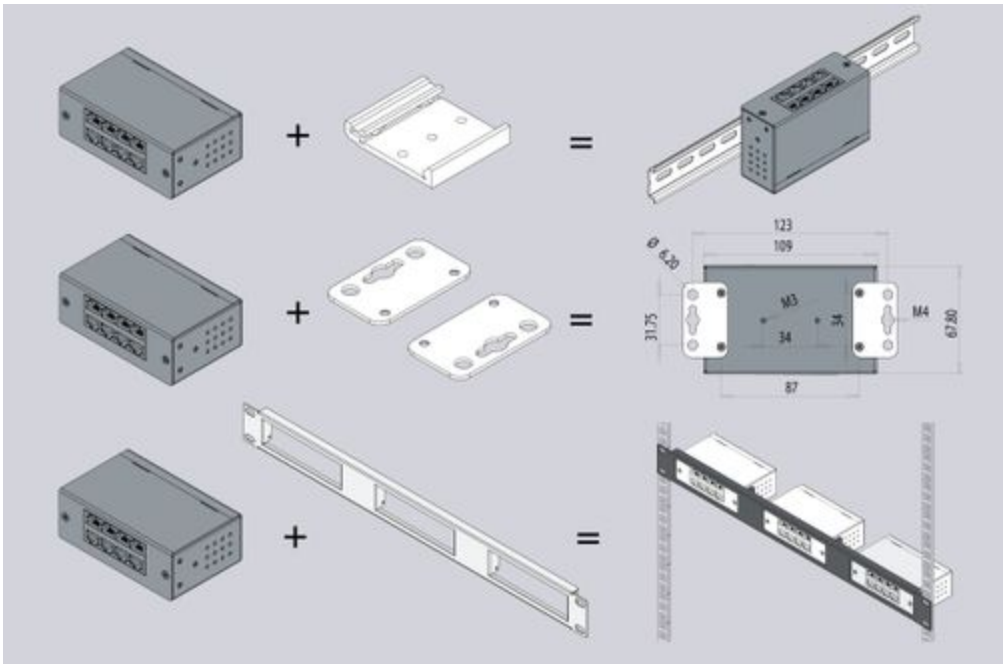


Mounting

Wall mount, DIN rail mount

There are mounting holes on the bottom of the unit. x2 central holes on the bottom for a DIN rail extension for DIN rail mounting. x4 holes on the sides on the bottom for wall mount extensions. It is also possible to mount a unit standard 19" side brackets.

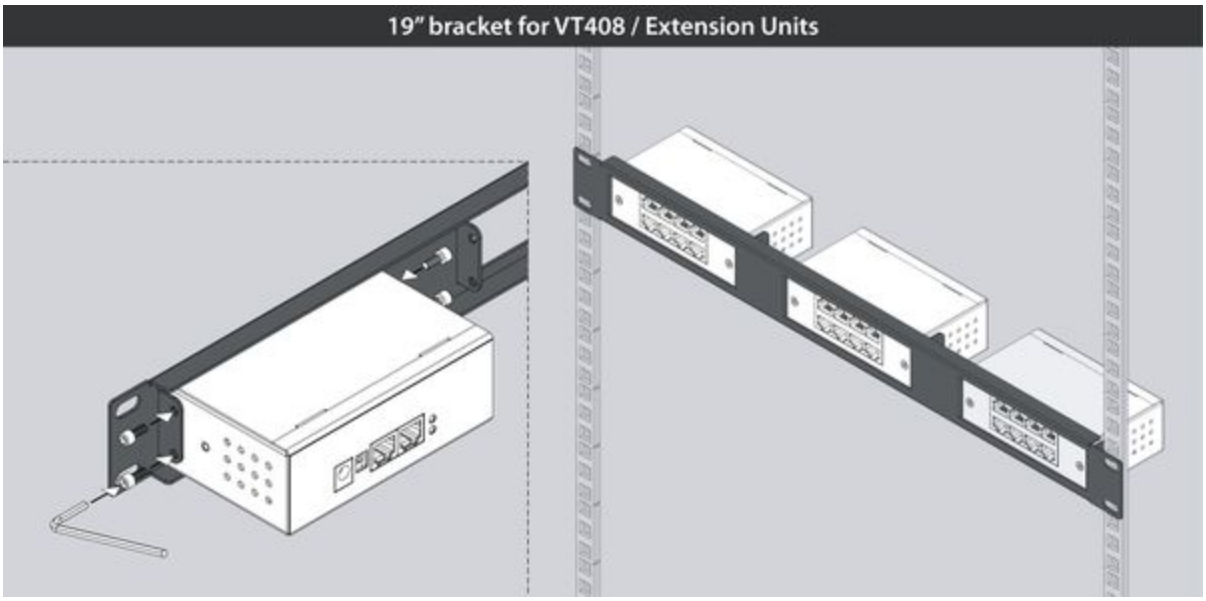




DIN rail extension, wall brackets are purchased separately.

19" mounting bracket

It is possible to use a 19inch mounting bracket to mount x3 VT408 units in one 1U rack space. "VT125 / 19" bracket" is purchased separately.



Installation

Connect CAN input of the unit by RJ11/RJ12 cable supplied to the CAN input of previous CAN unit or monitoring system. The red LED lights up. Match the TR bus terminators on the attached CAN units. CAN bus terminators TR (position 2 in VT450) should be in the ON state only at the end CAN units port and in Off states (1,2) for all intermediate units. One CAN bus can have not more than 8 CAN units, sensors, and/or another CAN device.

Normally 12V 0.5A external power supply is connected to the jack labeled PWR (point 2 in the general scheme). But if the only VT408 unit is connected and the length of the cable from the monitoring unit to the VT408 does not exceed 10m allowed the extension unit operation without any external power supply. In all other cases, the use of an external power supply is desirable.

Configuration

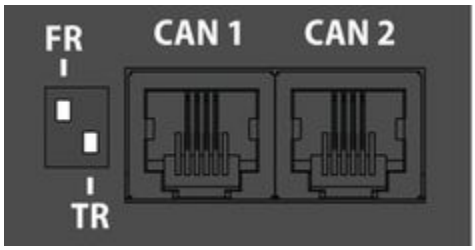
To connect CAN unit to the system, open interface and go → CAN Configuration → Select tab CAN.

Click "Configure" and wait. The system starts the CAN bus line survey, displays the list of connected CAN units and sensors. On the CAN devices, the green LEDs light up.

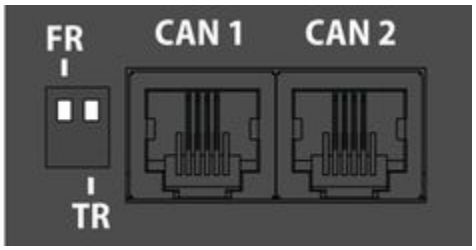
If you will go now to the "System tree", there you will see new CAN devices and/or new CAN sensors. Wait for a little or renew the tree.

If the survey is reset after click "Configure", it means that the line is not connected (bad cable and/or bad connectors) or not matched terminators on the bus. It is necessary to check and change the status of the line or the TR terminations.

Analog sensors are connected to the A-1 ... A-8 analog inputs on the module, the definition of the sensors will occur automatically.



pic.1.1: FR is OFF, TR is ON.



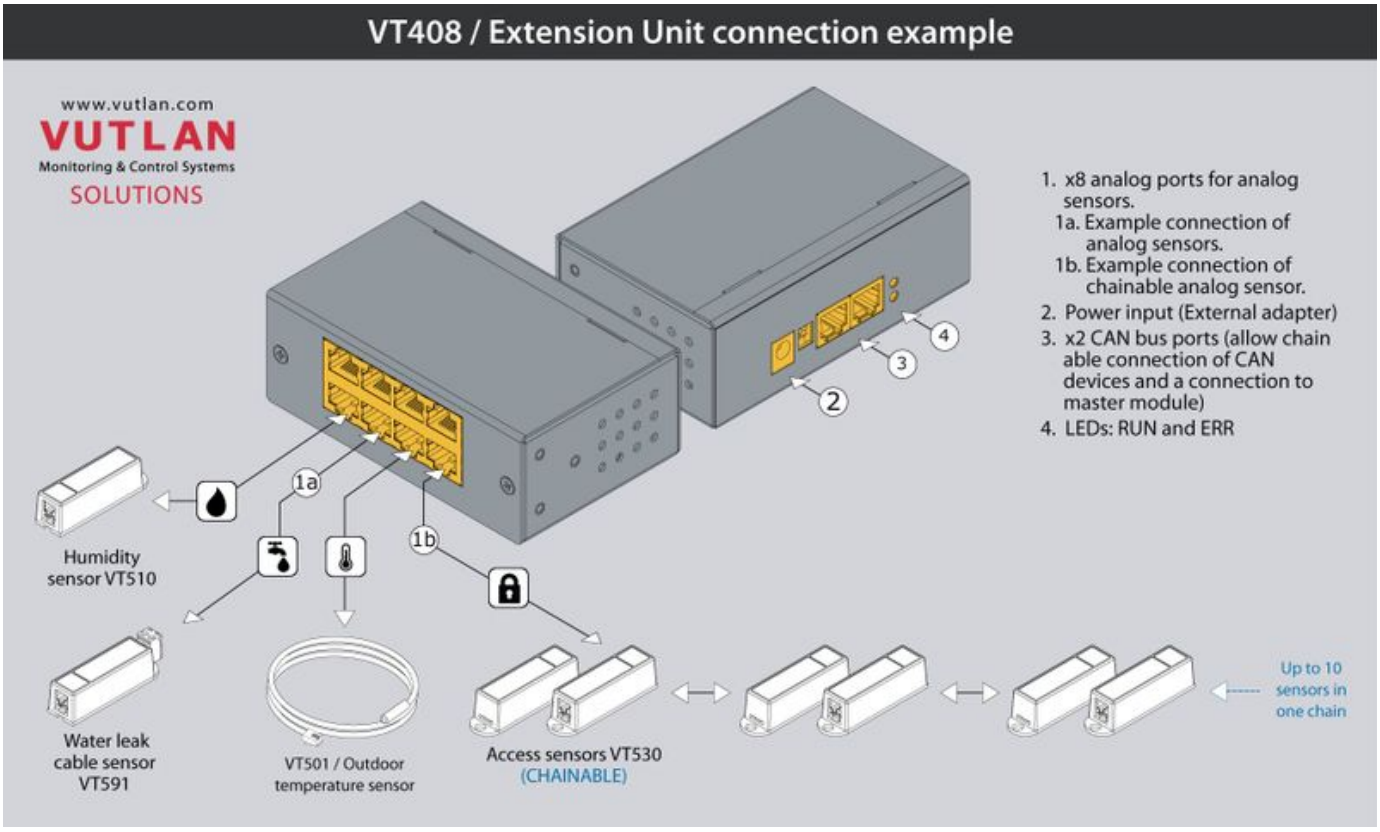
pic.1.2: FR is OFF, TR is OFF.

Ream more at:

Setting up CAN

Configuring VT408

Example connection



(Developer notes: physical description: metal case v 14.3)