

VT410 / DC voltage monitor

Functional description & components



Function & Order options

DC monitor is used for measurement of DC voltage 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.

VT410 75V: measured voltage 0-15V

VT410 15V: measured voltage 0-75V, better measurement for low voltages.

Inventory

[VT410 package contents](#)

Installation

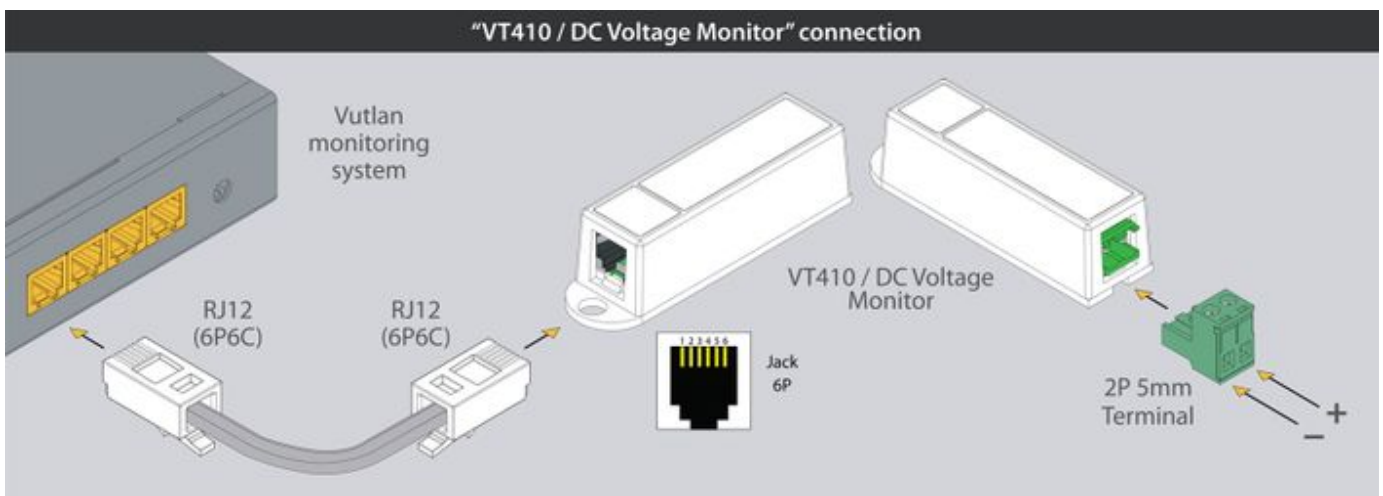
Only 6P6C RJ12 cable can be used with sensor! The cable is included with the sensor.

1. Connect one end of shielded 6P6C RJ12 cable to any Vutlan monitoring unit's analog port A1-A8, and the other end to VT410 / DC Voltage Monitor.



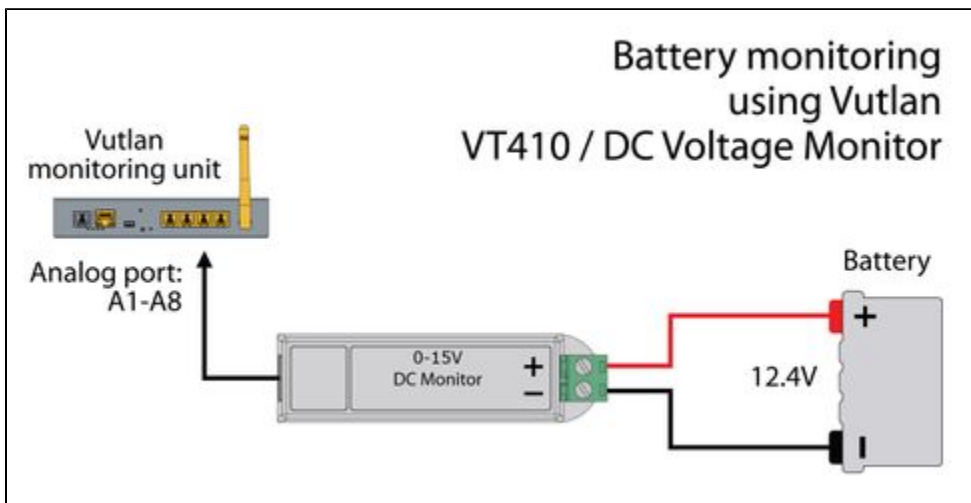
2.Connect "+" and "-" to the 2P terminal.

3.Insert the terminal into VT410.

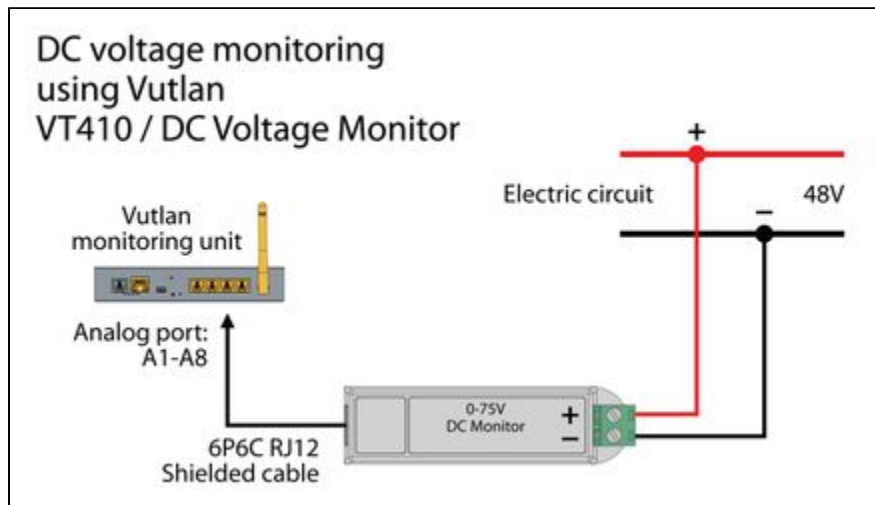


Examples

Example 1: measurement of battery voltage

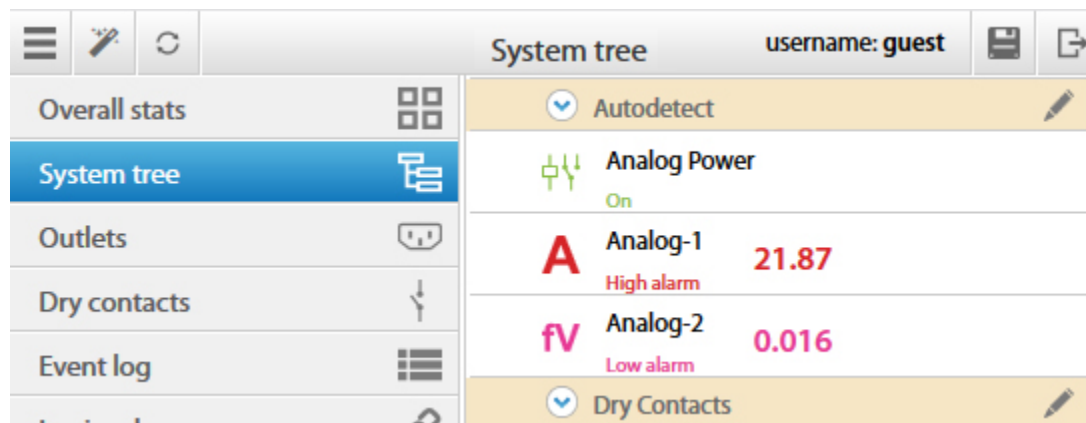


Example 2: measurement 48V electric circuit



Configuration

Once VT410 was connected to the analog ports of Vutlan monitoring system, the monitoring system will automatically sense current transducer as a sensor. It will appear in: "System tree" >> "Autodetect" >> **fV** (abbreviation from: Voltage function, used for sensor monitors and converters)



Click on the sensor to open it's properties. A modal window with sensor properties will pop up.

Voltage converter
×

Settings

Charts

All data

Name

ID

Type

User defined type

Class

Hardware port

Current state

Current value

Additional fields

DC Voltage monitor 1

204002
^

fvoltage

voltage

v

analog

2

Low alarm

0.24

expr = 14.8*x

Low alarm level

Low warning level

High warning level

High alarm level

36.9

41.7

51.5

55.0

0
74

Hysteresis type

Low alarm

Low warning

Normal

High warning

High alarm

time

1

1

0

1

1

Expression (f(x), for Instance: 2*x+123)

operators: +, -, *, /, %, ^

functions: abs(), sqrt(), exp(), ln(), log(), sin(), cos(), tan(), asin(), acos(), atan()

constants: pi, e

14.8*x

OK

Apply

Cancel

1. Change the name of sensor, for example "DC Voltage monitor 1".
2. Change type of the sensor by choosing "Voltage". Choosing any type of the sensor does not affect sensor properties, it only changes sensor icon for comfort of usage. For this example the icon will be V

current ▼

no
current
factor
frequency
humidity
power
temperature
vibration
voltage

3. Use "Expression formula": Each sensor has it's own expression formula. It is printed on the case of the sensor. For example:



This current sensor has an expression formular equal to "14.993*(x-0.019)"

4. Put in the threshold levels by dragging: Low alarm, Low warning, High warning, High alarm levels.



5. Click "Save" or "Apply" at the bottom of the "Properties" window. The page will reload. Save settings to flash by pressing on



Technical specifications

VT410 75V / DC Voltage monitor	
Dimensions	Size 60 × 18 × 18 mm
Measured voltage	0-75 V
Weight	100 g
Operating temperature	Temperature : Min. -10° C - Max.80° C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Outputs	4 pin terminal
Mounting	Desktop, Wall mount
Power Consumption	100 mW
K coefficient	=~14.8, used inside the interface
Max. distance m	50 m
HS Code	9030 33 100

Special features	Isolation - 1 kV, Measured voltage - 0..60 V, Accuracy - 1%.
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VT410 14.4V / DC Voltage monitor	
Dimensions	Size 60 × 18 × 18 mm
Measured voltage	0-14.4 V
Weight	100 g
Operating temperature	Temperature : Min. -10° C - Max.80° C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Outputs	4 pin terminal
Mounting	Desktop, Wall mount
Power Consumption	100 mW
K coefficient	=~ ?, used inside the interface
Max. distance m	50 m
HS Code	9030 33 100
Special features	Isolation - 1 kV, Measured voltage - 0..60 V, Accuracy - 1%.

Developer notes: