

VTEMP-232



Temperature sensor over RS-232

FEATURES

- Simple digital temperature sensor communicating over the RS-232 bus by a simple text protocol
- Temperature range -55°C to +125 °C
- Address of the sensor and the interval of the automatic report of the T° can be set in the terminal SETUP mode
- Can be set to operate in a Question-Answer mode
- Indication of measurement by a LED indicator
- Does not need power supply. Can be powered by the serial port
- Can be connected to any serial port of VIMATY touch panels or VITY controllers.
- Applications: enable displaying temperature sensor on a PC or on a VITY control touch screen



PARAMETERS

Temperature range	-55 °C to +125 °C
Resolution	0.1 °C
Accuracy of measurement	+/- 0.5 °C in the range -10°C to +85 °C +/- 2 °C in the range -55°C to +125 °C
Speed of measurement	max. response time 50ms the T° is measured once a second
Measuring element	DS18B20
Communication	ASCII, described in the specification
Communication parameters	9600 8N1
Communication link	RS-232 (Rx, Tx, GND, DTR, RTS)
State indication	The red indicator, blinks on each measurement The red indicator lights in Terminal SETUP mode

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OPERATION MODES

Mode selection

Auto report, if the variable D (outgoing delay) is different from 0
If the sensor is in Auto-report mode and receives a t° request, it goes automatically to question-answer mode

Auto-report mode

The t° reported regularly in a preset interval
Interval range 1 ... 255 seconds
Format report: <mark><3 digits = whole part °C><decimal point>
<1 digit - decimal part °C><C><CR><LF>
ex.: „+028.0C” (CR = 10 DEC, LF = 13 DEC)

Question-Answer mode

The t° is reported only after request
„Delay: 0s” has to be set in the SETUP mode
T° value request: „t” (116 DEC)
Report format with t° value: „+028.0C<CR><LF>”

Setting SETUP Terminal mode

Enter setup mode: send 20x „u” char (117 DEC) after switching on
Switching on the thermometer: set DTR or RTS to „On”
Parameter choice in setup mode: First letter of the command

```
#### Temp232  SETUP ####  
####  Hw: 1  Fw:1.2  ####
```

```
Temperature:      +030.3C  
D: Outg. delay:      0s  
X: Exit  
### www.HW-group.com ###
```

```
Temp232>
```

