



HWg-STE Temperature Sensor Configuration



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<https://pandorafms.com/manual/!current/>
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https://pandorafms.com/manual/!current/en/documentation/pandorafms/technical_annexes/05_hwg-ste_sensor
2024/12/03 19:32



HWg-STE Temperature Sensor Configuration

Introduction

This quick configuration guide explains how to use Pandora FMS to monitor a HWg-STE temperature sensor with email alerts and a basic report.

Installation and configuration

Step 1. Installing Pandora FMS

[Online installation](#) is recommended.

Step 2. Sensor installation

Sensor model: HWg-STE.

Manufacturer's documentation:

http://www.hw-group.com/products/HWg-STE/STE_ip_temperature_sensor_en.html


Sensor manual link:

https://web.archive.org/web/20100307054059/https://www.hw-group.com/download/HWg-STE_MAN_en.pdf

The most important thing is to configure the access IP address and make sure that the temperature sensor is connected and to know its OID. To do this, access the device through the web and configure:

General

Base Information	
Device Name	cpd
Time	13:00:21
Date	05.07.2011

Sensors			
State	Name	Type	Current Value
	Sensor 215	Temp.	34.1 °C

In the System → TXT List of common SNMP OID's screen, the OID of the sensor can be queried:

Hwg-STE SNMP OID description

System Values:

```

.1.3.6.1.2.1.1.1.0      System Description (string)
.1.3.6.1.2.1.1.2.0      System ObjectID   (objid)
.1.3.6.1.2.1.1.3.0      System UpTime     (timeticks)
.1.3.6.1.2.1.1.4.0      System Contact    (string)
.1.3.6.1.2.1.1.5.0      System Name       (string)
.1.3.6.1.2.1.1.6.0      System Location   (string)
.1.3.6.1.2.1.1.7.0      System Services   (integer)
.1.3.6.1.4.1.21796.4.1.70.1.0 System MAC address (string)

```

Sensors Values, (n = 1..x)

```

.1.3.6.1.4.1.21796.4.1.3.1.1.n Sensor Index      (integer, NUM (1..x))
.1.3.6.1.4.1.21796.4.1.3.1.2.n Sensor Name       (string, SIZE (0..16))
.1.3.6.1.4.1.21796.4.1.3.1.3.n Sensor State      (integer, 0=Invalid, 1=Normal, 2=OutOfRangeLo)
.1.3.6.1.4.1.21796.4.1.3.1.4.n Sensor String Value (string, SIZE (0..10))
.1.3.6.1.4.1.21796.4.1.3.1.5.n Sensor Value      (integer, current value *10)
.1.3.6.1.4.1.21796.4.1.3.1.6.n Sensor SN         (string, SIZE (0..16))
.1.3.6.1.4.1.21796.4.1.3.1.7.n Sensor Unit       (integer, 0=unknown, 1=°C, 2=°F, 3=°K, 4=%)
.1.3.6.1.4.1.21796.4.1.3.1.8.n Sensor ID         (integer, NUM (0..x))

```

For more details, analyze MIB file or check detailed device's manual..

Since there is only one sensor, the OID will be:

```
.1.3.6.1.4.1.21796.4.1.3.1.5.1
```

It should be noted that the device returns the temperature in degrees Celsius without decimal separator. The value must be divided by 10 in order to display the real value, this post-processing is done in Pandora FMS.

The IP address of the device is queried:

Base		
Name	Value	Description
Device Name	<input type="text" value="cpd"/>	0 to 16 characters
WWW Info Text	<input a>"="" http:="" type="text" value="HWg-STE: For more information try www.hw-group.com<=""/>	
Temperature unit	<input type="text" value="Celsius"/>	Celsius/Fahrenheit/Kelvin
Periodic restart	<input type="text" value="Off"/>	Periodic restart time
Web refresh	<input type="text" value="1"/> [s]	Automatic refresh period of the main web page.
<input type="button" value="Save"/>		

Network		
Name	Value	Description
DHCP	<input type="checkbox"/>	DHCP Enable/Disable
IP Address	<input type="text" value="192.168.50.233"/>	A.B.C.D
Network Mask	<input type="text" value="255.255.255.0"/>	A.B.C.D
Gateway	<input type="text" value="192.168.50.100"/>	A.B.C.D
DNS Primary	<input type="text" value="194.179.1.101"/>	A.B.C.D
DNS Secondary	<input type="text" value="192.168.50.2"/>	A.B.C.D
HTTP Port	<input type="text" value="80"/>	Default 80
<input type="button" value="Save"/>		

Step 3. Sensor configuration in Pandora FMS

Go to the agent configuration screen. Create an agent and fill in the relevant information. The agent must have the queried IP address of the sensor. A Numeric data Remote SNMP network agent module is defined in modules.

In the SNMP OID field, the previously obtained SNMP OID is placed. By default the SNMP community is public.

Target IP	<input type="text" value="192.168.50.233"/>	Port	<input type="text"/>
SNMP community	<input type="text" value="public"/>	SNMP version	<input type="text" value="v. 1"/>
SNMP OID	<input type="text" value=".1.3.6.1.4.1.21796.4.1.3.1.5.1"/>		

In the advanced section specify a postprocess that divides the value by 10:

Post process 

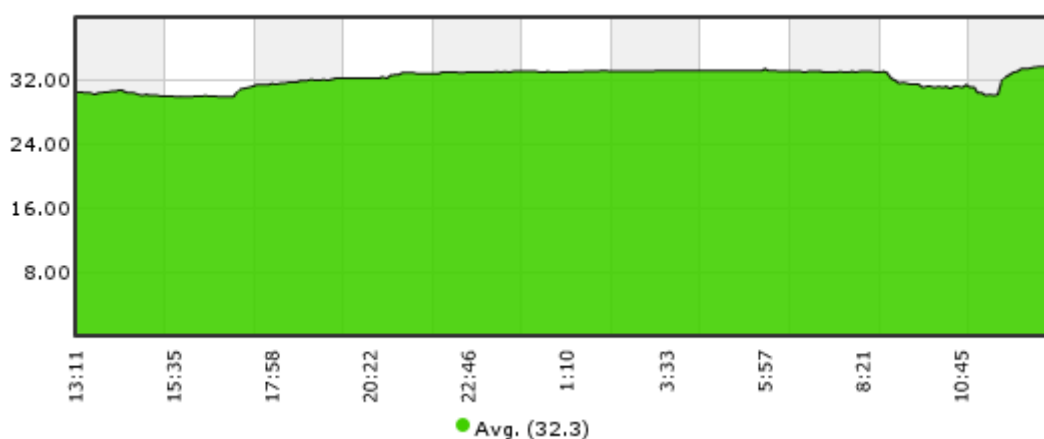
Click on create module. You should see something like this image:

Temp/c

SNMP
DATA

300

You will be able to see the data obtained from the sensor, in a few hours you will have enough data for a graph like this one:



Step 4. Set up an alert

So that when 38 degrees Celsius is exceeded, an alert is generated by e-mail. The thresholds are modified so that CRITICAL is set at 38 °C and above:

Critical status	Min. <input type="text" value="38"/>
	Max. <input type="text" value="0.00"/>

An alert action is defined to send an email to a specific address. Go to the menu Management → Alerts → List of alerts and create a new one. Define an alert action for generic mailing, for any module that is set in CRITICAL status. After creating the action, just define an alert in the agent containing the sensor.

Edit the agent and go to the alerts tab, create a new alert, starting from the default alert template "Critical condition". Once all these steps are done, the alert will be ready.

Step 5. Creating a basic report

To create a report with a simple temperature graph, and the average and maximum value.

Go to menu Operation → Reporting → Custom reports → Create report.

Go to the key tab to add items to the report and choose an Simple graph item.

In the same way, two elements of type AVG (Average) and MAX (Maximum value) must be created. Once they have been created, to display them, click on the report display tab (the first one on the left).

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