

## Setup and Test SMS Messaging

To test a modem installed on an ENVIROMUX Monitoring System, you must first make sure the System has been configured properly to use the modem. This guide will take you through the basic steps to do that. For more details, see your respective product manual.

1. Install a USB modem as directed on the respective manual for the ENVIROMUX-product:

Product	Page	Manual
ENVIROMUX-2D/5D/16D	17	<a href="http://www.networkteching.com/pdf/man154.pdf">www.networkteching.com/pdf/man154.pdf</a>
ENVIROMUX-MINI-LXO	19	<a href="http://www.networkteching.com/pdf/man143.pdf">www.networkteching.com/pdf/man143.pdf</a>
ENVIROMUX-MICRO	10	<a href="http://www.networkteching.com/pdf/man220.pdf">www.networkteching.com/pdf/man220.pdf</a>
ENVIROMUX-1W	11	<a href="http://www.networkteching.com/pdf/man253.pdf">www.networkteching.com/pdf/man253.pdf</a>

2. Configure the ENVIROMUX User Account Contact settings (Administration -> Users -> Edit User -> Contact Settings) to receive SMS Alerts and enter a valid phone number for the SMS messages to be sent to for that user. Also make sure that user is set to receive messages from the type of sensor causing the message to be sent. Make sure enough boxes are checked under "Group Settings."

The screenshot shows the 'Group Settings' and 'Contact Settings' sections of the ENVIROMUX web interface. The 'Group Settings' section has checkboxes for various sensor types, all of which are checked. The 'Contact Settings' section includes fields for E-mail Alerts (checked), Brief E-mail (unchecked), E-mail Address (user@somewhere.com), Syslog Alerts (checked), Syslog Facility (Local 0), SNMP Traps (unchecked), Syslog/SNMP IP Address (192.168.3.10), SMS Alerts (checked), and SMS Number (123-456-7890). A callout box points to the SMS Number field with the text 'Make sure this is a valid phone number'.

(Image from the ENVIROMUX-XD web interface under User Settings)

3. Configure a sensor to send alerts via SMS messaging.

For an ENVIROMUX-2D/5D/16D or ENVIROMUX-MINI-LXO, the Sensor Configuration has the settings to be changed. For an ENVIROMUX-MICRO-T(RHP) or ENVIROMUX-1W, settings to enable SMS messaging are found under Alert Configuration.

First make sure the sensor will send messages to a group the user is configured to get messages from, again, under "Group Settings" for that sensor.

Group Settings	
Group 1	<input checked="" type="checkbox"/> Sensor sends notifications for Group 1
Group 2	<input type="checkbox"/> Sensor sends notifications for Group 2
Group 3	<input type="checkbox"/> Sensor sends notifications for Group 3
Group 4	<input type="checkbox"/> Sensor sends notifications for Group 4
Group 5	<input type="checkbox"/> Sensor sends notifications for Group 5
Group 6	<input type="checkbox"/> Sensor sends notifications for Group 6
Group 7	<input type="checkbox"/> Sensor sends notifications for Group 7
Group 8	<input type="checkbox"/> Sensor sends notifications for Group 8

(Image from the ENVIROMUX-XD web interface under Configuration for a Sensor)

### Configure Alert

Alert Settings	
Associated Sensor	Internal Temperature <small>Sensor associated to this alert</small>
Groups	<input checked="" type="checkbox"/> Group 1 <input checked="" type="checkbox"/> Group 2 <input checked="" type="checkbox"/> Group 3 <input checked="" type="checkbox"/> Group 4 <input type="checkbox"/> Group 5 <input type="checkbox"/> Group 6 <input type="checkbox"/> Group 7 <input type="checkbox"/> Group 8
Trigger Event	Greater than ▾
Threshold	50.00 <small>Threshold value</small>
Alert Delay	2 (sec) <small>Duration the sensor must be out of thresholds before alert is generated</small>
Auto Acknowledge	<input type="checkbox"/> Automatically acknowledge alert when sensor returns to normal status
Notify on return to normal	<input type="checkbox"/> Send a notification when this sensor returns to normal status
Notify Again Time	120 (min) <small>Time after which alert notifications will be sent again</small>
Enable Syslog	<input checked="" type="checkbox"/> Send alerts for this event via syslog
Enable SNMP Traps	<input type="checkbox"/> Send alerts for this event via SNMP traps
Enable E-mail Alerts	<input type="checkbox"/> Send alerts for this event via e-mail
Enable SMS Alerts	<input type="checkbox"/> Send alerts for this event via SMS messages

Group Settings for this product



Save

(Image from the ENVIROMUX-MICRO web interface under Alert Settings)

Next make sure that “Enable SMS Alerts” is checked. Also make sure that “Disable Alerts” is **NOT** checked for this sensor.

**Non-Critical Alert Settings**

**Disable Alerts**  ← **Make sure there is NO checkmark in this box if you want this sensor to send alert messages!**

**Alert Delay** 5  **Sec** ▾  
Duration the sensor must be out of thresholds before alert is generated

**Notify Again Time** 6  **Hr** ▾  
Time after which alert notifications will be sent again

**Notify on return to normal**   
Send a notification when this sensor returns to normal status

**Enable Syslog Alerts**   
Send alerts for this sensor via syslog

**Enable SNMP Traps**   
Send alerts for this sensor via SNMP traps

**Enable E-mail Alerts**   
Send alerts for this sensor via e-mail

**E-mail Subject** E-16D-M Temperature 1 W  
Subject of e-mails sent for alerts

→ **Enable SMS Alerts**  ← **With the ENVIROMUX-xD, you can not only send standard SMS alerts that include the text in the E-mail subject line, you can also customize that message to say something other than the text in the e-mail subject line.**

**Send custom SMS**  ←

**Customized SMS**  ←  
Customized SMS message sent for alerts

**Enable Siren**   
Turn on the siren when this sensor goes to alert

(Image from the ENVIROMUX-XD web interface under Sensor Configuration Settings)

4. Once the sensor (or alert in case of the ENVIROMUX-MICRO and -1W) is configured, and the user settings include the correct settings and valid phone number, a test can be conducted.

The web interface for the ENVIROMUX-xD includes a button that simulates an alert message being sent. This is found under the sensor configuration for each sensor.

**Alert Simulation**

With the ENVIROMUX-MINI-LXO, ENVIROMUX-MICRO-T(RHP) and ENVIROMUX-1W, to test the settings you will instead need to cause a sensor to go outside the alert conditions (or, change the settings so that the current conditions ARE considered alert conditions).

Once the alert is tripped or simulated, the phone number for the configured user should receive the configured SMS message.

## Troubleshooting

If no message is received, double-check all of the settings just described. Then check your modem status and strength.

- In the ENVIROMUX-xD and –MINI-LXO, this is found under **Administration ->Enterprise**
- In the ENVIROMUX-MICRO-T and -1W, this is found under **Administration -> System**

When installed and working, the modem status will say “Ready” (ENVIROMUX-xD) or “Connected” (ENVIROMUX-MICRO) and the signal strength will be indicated. Ideally, signal strength should always be at least -100db. (-99, -98 is better, -101,-102 is worse). If the modem is plugged in and not working, make sure your SIM card is up to date and paid for with your service provider.

GSM Modem Status	
Modem Type:	Not Available
IMEI:	
Modem Status:	Not Connected
Signal Power:	No Signal
	

**No Modem Installed**


GSM Modem Status	
Modem Type:	USB Modem
IMEI:	352071041541975
Modem Status:	Ready
Signal Power:	-107 dBm
	

**Modem properly installed in an ENVIROMUX-Xd (Note: Signal strength shown here is extremely poor)**

## Enterprise Configuration

Enterprise Settings	
<b>Enterprise Name</b>	<input type="text"/> Name to identify this unit
<b>Location</b>	<input type="text"/> Location/Address
<b>Contact</b>	<input type="text"/> Contact person
<b>Phone</b>	<input type="text"/> Phone number of contact person
<b>E-mail</b>	<input type="text"/> E-mail address for messages sent from this unit

GSM Modem Status	
Modem Type:	USB Modem
IMEI:	353254030124511,PZ2996N2VN
Modem Status:	Ready
Signal Power:	-103 dBm
	

**Modem properly installed in an ENVIROMUX-MINI-LXO**

### System Settings

Serial Number:	E03
MAC Address:	00:0c:82:15:00:03
SNMPv3 Engine ID:	80001f8803000c82150003
Unit Name	E-MICRO-E03 <small>Name assigned to this unit</small>

Save

Reboot

### GSM Modem Status

Modem Status:	Not Connected
IMEI:	N/A
Signal Power:	N/A

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#### Modem Status on an ENVIROMUX-MICRO-T

If the signal to the modem is too weak, then either the ENVIROMUX will need to be moved or the modem will have to be moved (you can extend the modem up to 5 meters (16.4 feet) from the ENVIROMUX with a USB extension cable).

#### CMS Error Codes

With ENVIROMUX-xD units, there is also a feature under Log Settings for setting the Logging Level. Try setting the Logging Level to “Debug”, and test the SMS messaging again. If the SMS message does not work, check the event log for an error code. “CMS error #500” for example, might show up. Perform a web search on the error code to investigate the possible cause (“SIM card inactive”) for example.

### Log Settings

→

Event Log Settings

Logging Level	Alert ▾ <small>Select logging level</small>
Group	2 ▾ <small>Select which group the event log belongs to</small>
Overflow Action	Discontinue Log ▾ <small>Choose the action to take when the event log overflows</small>
Enable Syslog Alerts	<input type="checkbox"/> <small>When event log reaches 90% of capacity, send alerts via syslog</small>
Enable SNMP Traps	<input type="checkbox"/> <small>When event log reaches 90% of capacity, send alerts via SNMP traps</small>
Enable E-mail Alerts	<input type="checkbox"/> <small>When event log reaches 90% of capacity, send alerts via e-mail</small>

#### Log Setting configuration in ENVIROMUX-xD