

ENTERPRISE SERVER ENVIRONMENT MONITORING SYSTEM

SNMP and Web monitoring/management of server room environments

Monitors Threats:

- **Temperature**
- **Humidity**
- **Intrusion**
- **Water Leakage**
- **Vibration**
- **Smoke**



ENVIROMUX-SEMS-16 (Front and Back)

Features & Applications

The ENVIROMUX® Server Environment Monitoring System monitors critical environmental conditions, such as temperature, humidity, liquid water presence, motion, intrusion, and vibration. When a sensor goes out of range of a configurable threshold, the system will notify you via email, LEDs, alarm beacon, siren, web page, network management (SNMP), voice phone calls (via Automatic Voice Dialer System), and SMS messages (via external GSM or 3G modem).

The system includes three internal sensors: temperature, humidity and power. It also supports 16 external configurable sensors and eight digital input sensors.

- Monitor and manage server room environmental and security conditions over IP.
- Create alarm signals with customized input parameters.
- Four output relays for control of external devices.
 - Relays activate upon alarm or via the user interface.
- Supports IP network video camera.
 - Live view of a facility from anywhere, anytime.
 - One integrated view - see different Web cameras side-by-side with physical and environmental parameters.
- Monitor (ping) up to 64 IP network devices.
 - Alerts are sent if devices are not responding.
- Integrates with various Open Source monitoring packages — Nagios and MRTG.
- Provides power supply for all sensors.
- Internal battery backup.
 - Alerts are sent when there is a power outage and when power returns.
- Available sensors include: temperature, humidity, smoke, water, glass break, motion, vibration, 4-20mA converter, voltage detector, and more.
- Available with optional dual power for connection to two separate power sources.
- Available with optional 48VDC or 24 VDC power.
- Up to four units can be used together to increase the number of sensors connected.
 - Connect the units using CAT5 expansion cables.
 - Uses a single Web interface for all systems connected.
- 1RU rack mount case is standard.
- Use in data centers, co-lo sites, web hosting facilities, telecom switching sites, POP sites, server closets, or any unmanned area that needs to be monitored.
- Optional intuitive graphical software provides an easy-to-use, unified interface for both monitoring and configuring up to 3,000 ENVIROMUX-SEMS-16 units and all connected sensors.

Specifications

Protocols

- HTTP, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSL
- Operates and configures via HTTP/HTTPS web page, Telnet or RS232 interface.
- Alerts are sent using email, SMS messages and/or SNMP traps when any monitored environmental condition exceeds a user-specified range.
 - Alerts are posted in message log, which is accessible through Web user interface. The log can be downloaded as a tab delimited plain text file.
 - Sends notifications of alerts to a maximum of 17 email addresses, SNMP addresses and/or cell phone numbers.
 - SNMP traps have unique OID's (Object Identifiers) for each sensor.

Internal Temperature Sensor

- Applications from 32°F to 104°F (0°C to 40°C).
- Accurate to within ±1.35°F (±0.75°C).

Dimensions

- WxDxH (mm): 483x231x44

MTBF

- ENVIROMUX-SEMS-16: 56,709 hrs.

Internal Humidity Sensor

- Applications from 20% to 80% relative humidity at temperatures between 32°F to 104°F (0°C to 40°C).
- Accurate to within ±5% relative humidity.

Internal Power Sensor

- Measures mains voltage: 0 to 255 VAC.
- Measures battery voltage: 0 to 20 VDC
- Alerts are sent when there is a power outage and when power returns.

Back-up Battery

- Rechargeable sealed lead-acid battery.
- Provides back-up for one hour.

Environmental

- Operating temperature: 32°F to 100°F (0°C to 38°C).
- Storage temperature: -22°F to 140°F (-30°C to 60°C).
- Operating and Storage Relative Humidity: 17 to 90% non-condensing RH.

Regulatory Approvals

- CE, RoHS

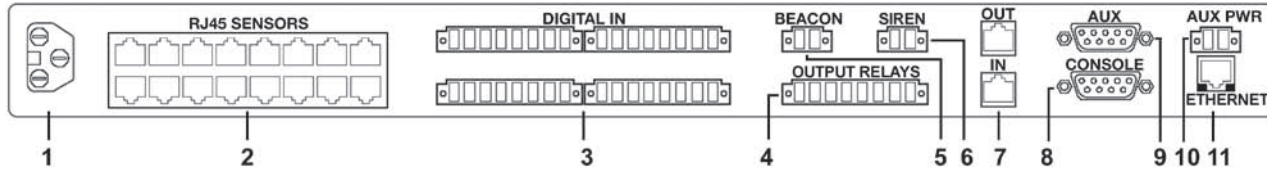
Warranty

- Two years.

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Specifications (Continued)



1. Power Port

- 110 or 230 VAC at 50 or 60 Hz via IEC connector.
- Power consumption: 100W max.
- Connection for Earth Ground.
- Fuse protection.
- Optional dual power (not shown).
 - ♦ 110 or 230 VAC at 50 or 60 Hz via IEC connector.
 - ♦ If the first power source fails, the unit will automatically, without interruption, switch over to the second power source before switching to the battery backup.
- Optional 48 VDC power (not shown).
 - ♦ Accepts 36~72VDC (48 VDC nominal).
- Optional 48 VDC dual power (not shown).
 - ♦ Accepts 36~72VDC (48 VDC nominal).
 - ♦ If the first power source fails, the unit will automatically, without interruption, switch over to the second power source before switching to the battery backup.
- Optional 24 VDC power (not shown).
 - ♦ Accepts 20~32VDC (24 VDC nominal).
- Optional 24 VDC dual power (not shown).
 - ♦ Accepts 20~32VDC (24 VDC nominal).
 - ♦ If the first power source fails, the unit will automatically, without interruption, switch over to the second power source before switching to the battery backup.

2. RJ45 Sensor Ports

- Sixteen RJ45 modular jacks.

3. Digital Inputs

- Eight screw terminals pairs for connecting dry contact devices.
- Input voltage: 0VDC to +25VDC.
- Provides +12VDC, 50mA.
- Fuse protection.

4. Output Relays

- Four screw terminal pairs.
- Potential-free relay switch contacts.
- Maximum switching load: 0.5A at 100VAC, 1A at 30VDC

5. Beacon Port

- One screw terminal pair.
- Provides +12VDC, 180mA to supply an alarm beacon.
- Fuse protection.

6. Siren Port

- One screw terminal pair.
- Provides +12 VDC, 180 mA to supply a siren.
- Fuse protection

7. Expansion Ports

- Two RJ45 jacks.
- A maximum of 4 systems can be cascaded to increase the number of sensor ports.
- Uses a single Web interface for all systems connected.

8. Console Port

- One female DB9 RS232 serial port for terminal access.

9. AUX Port

- One male DB9 RS232 serial port for controlling and monitoring external equipment, such as a GSM modem.
 - ♦ GSM modems supported: Teltonika WirelessCom/G10
Enfora GSM1218, MultiTech MTCBA-G-F2, Wavecom
Fastrack M1306
- 3G modem supported: NetComm N3GS003

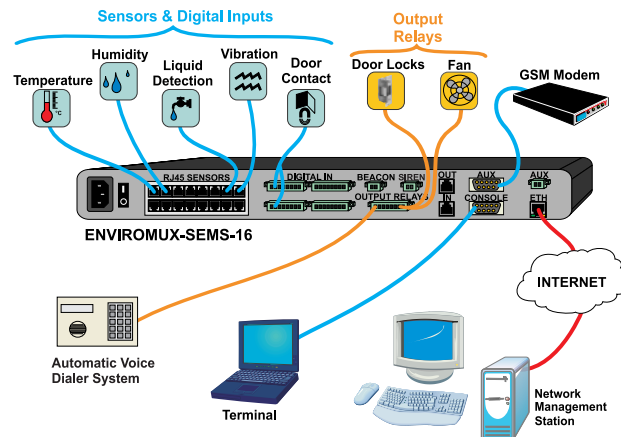
10. AUX Power Port

- Provides +12VDC, 150mA.
- Fuse protection

11. Ethernet Port

- One 10/100 Base-T Ethernet port with female RJ45 connector.

Configuration and Cable Illustration



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Control Methods

Web Interface

- Full configuration via Webpage.
- Support for Extended ASCII characters.
- Configure sensor thresholds and timing, alarm methods, alert formats and system data log.
- View current sensor values and alert status.
 - All sensors connected to the ENVIROMUX-SEMS-16 can be viewed on one summary page.
 - "Simulate"/"Clear" buttons for each sensor to test alert settings.
- View entries stored in the system data log.
 - The log can be downloaded as a tab-delimited plain text file.
- Configure IP information (address, subnet mask, default gateway, DNS, etc.) and user administrative settings.
- Administrate up to 16 users plus a root administrator.
- Permissions, schedule and alert methods are configurable for each user.
- Up to 8 users can access the web page at one time.

Telnet

- Similar functions as RS232 Control.
- Security is ensured by password.

Optional Management Software

- Intuitive graphical software provides an easy-to-use, unified interface for both monitoring and configuring up to 3,000 ENVIROMUX-SEMS-16 units and all connected sensors.
- Units may be monitored and configured individually or in a group.
- Display values and status for individual sensors or list of sensors.
- Client/server architecture
 - Server application actively polls all units for status information as well as listen for alerts from all units.
 - Client application communicates with the server to read statuses and to deploy configuration changes.
- Support Windows 2000/XP/Vista/Server 2000/2003/2008, Solaris, Linux, FreeBSD, and MAC OS 9/10.
- Requires Java Runtime Environment 1.5 or later.

Network Operation

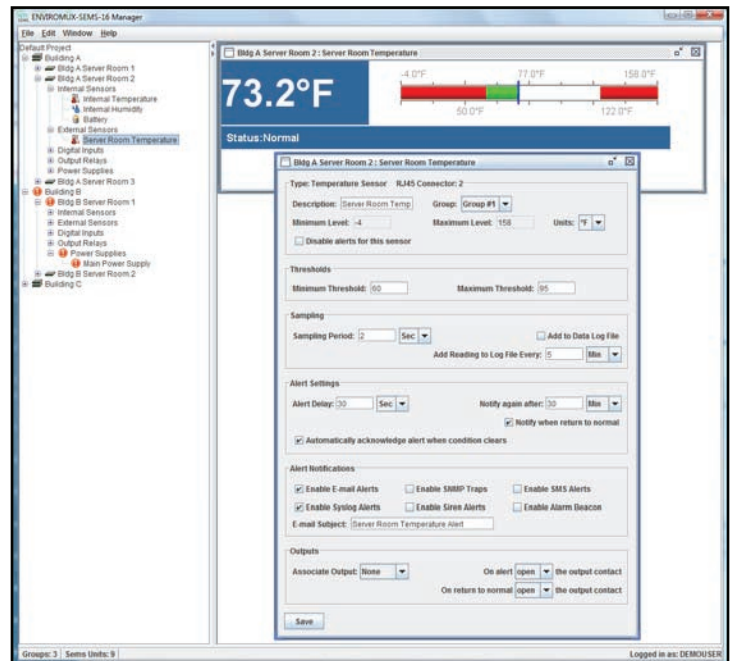
- SNMP support; allows integration into network management platforms.
- Update system firmware.

RS232 Control

- Display and configure network settings (IP address, subnet mask, default gateway, DNS, SMTP, etc.), Enterprise settings, and time settings.
- View current values and alert statuses for sensors/digital inputs/IP devices.
- Configure SNMP
- Serial baud rate: 9,600 to 115,200bps.
- Data format: 1 start bit, 8 data bits, no parity, 1 stop bit.

Front Panel LED Indicators

- "INT ALERT" – internal sensor goes out of range of a configurable threshold.
- "EXT ALERT" – external sensor goes out of range of a configurable threshold.
- "LOW BAT" – backup battery is low.
- "CHECK LOG" – message is posted to the log.
- "PWR" – indicates device is powered.



Screen Shot of the NTI ENVIROMUX-MS-SEMS Management Software.

ENTERPRISE SERVER ENVIRONMENT MONITORING SYSTEM

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Environmental Sensors

Temperature, Humidity & Combination Sensor



ENVIROMUX-STHS
ENVIROMUX-SHS
ENVIROMUX-STHS
ENVIROMUX-STHS-99

- Temperature Sensor (ENVIROMUX-STHS)
 - Applications from 32°F to 122°F (0°C to 50°C).
 - Accurate to within $\pm 0.9^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$).
- Humidity Sensor (ENVIROMUX-SHS)
 - 20% to 80% relative humidity, $\pm 5\%$
 - ◆ For applications from 32°F to 104°F (0°C to 40°C)
- Temperature/Humidity Sensor (ENVIROMUX-STHS)
 - Applications from 32°F to 122°F (0°C to 50°C) and 20% to 80% relative humidity.
 - Accurate to within $\pm 0.9^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$) and $\pm 5\%$ relative humidity.
- Temperature/Wide Range Humidity Sensor (ENVIROMUX-STHS-99)
 - Applications from 0°C to 50°C (32°F to 122°F)
 - Accurate to within $\pm 2^\circ\text{F}$ ($\pm 1^\circ\text{C}$)
 - ◆ 20% to 80% relative humidity, $\pm 3\%$
 - ◆ 10% to 90% relative humidity, $\pm 4\%$
 - ◆ 0% to 99% relative humidity, $\pm 5\%$
- RJ45 connector.
- Supports CAT5/5e/6 cable up to 305 meters (not included).
- Regulatory approvals: CE, RoHS

Liquid Detection Sensor



ENVIROMUX-LDSx-y

- For warning of flooding.
- Detects liquid depth > 0.25 cm.
- Minimum puddle: 1.53 cm diameter.
- 100% waterproof electronics.
- Detects any liquid, except deionized water.
- RJ45 connector.
- Supports CAT5/5e/6 cable up to 305 meters (not included).
- Supports water sensor cable lengths from 0.3 to 305 meters.
- Supports 2-wire cable lengths from 1.52 to 30.5 meters.
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS
- Compatible with ENVIROMUX-SEMS-16.

Precision Humidity & Temp/Humidity Sensors



ENVIROMUX-SHS-PLT
ENVIROMUX-STHS-PLT-xxx

- Precision Humidity Sensor (ENVIROMUX-SHS-PLT)
 - NIST certified accurate to within $\pm 1\%$ from 10% to 80% relative humidity at 77°F to 95°F (25°C to 35°C).
 - Two-point field calibration.
 - Output: 4-20mA DC = 0% to 100% RH.
- Precision Temperature/Humidity Sensor (ENVIROMUX-STHS-PLT-xxx)
 - Available temperature ranges:
 - ◆ ENVIROMUX-STHS-PLT-140 -20°F to 140°F (-28°C to 60°C).
 - ◆ ENVIROMUX-STHS-PLT-120 20°F to 120°F (-6°C to 48°C).
 - ◆ ENVIROMUX-STHS-PLT-180 30°F to 180°F (-1°C to 82°C).
 - Temperature accurate to within $\pm 1.50\%$.
 - NIST certified accurate to within $\pm 1\%$ from 10% to 80% relative humidity at 77°F to 95°F (25°C to 35°C).
 - Uses a platinum RTD for precision temperature compensation.
 - Sensing element: 1000W platinum; 2 lead resistance thermometer, .00385 TCR
 - Two-point field calibration.
 - Output: 4-20mA DC = 0% to 100% RH.
- All units require the ENVIROMUX-S420MA to operate.

Smoke Detection Sensor



ENVIROMUX-SDS

- For warning of smoke.
- Built-in 135° F (57° C) thermal heat sensor.
- Includes mounting hardware.
- Connect to RJ45 or digital input sensor ports.
- Supports CAT5/5e/6 UTP or STP cables.
- Photoelectric smoke detector.
- Screw terminal
 - To connect to the RJ45 inputs use CAT5/5e/6 cable terminated at one end with RJ45 connector. Connect the un-terminated end to the sensor screw terminal.
- Maximum cable length: 305 meters
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: UL



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Environmental Sensors (Continued)

Air Velocity Sensor



**ENVIROMUX-AV
w/Converter
ENVIROMUX-S5VDC**

- Reliable sensor for measurement of air velocity.
- Requires the ENVIROMUX-S5VDC sensor converter to operate.
- Flow range: 0-10m/s
- Accuracy: $\pm 5\%$ of measuring value at 68°F (20°C).
- Dust resistant design.
- Includes mounting hardware.
- Regulatory approvals: CE, RoHS.

5VDC Sensor Converter



ENVIROMUX-S5VDC

- External RJ45 device monitors up to two linear DC sensors, 0VDC ~ 5VDC
- Provides 12VDC, 25mA for each sensor
- Connector: Screw Terminal, 8-position.
- Supports CAT5/5e/6 cable up to 305m (not included)
- Includes Mounting Hardware
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS.
- Compatible with ENVIROMUX-SEMS-16 only.

Carbon Monoxide Detector



ENVIROMUX-CMD

- Continuous air monitoring.
- Pre-set alarm points alert at:
 - 70 ppm after 60 to 240 minutes
 - 150 ppm after 10 to 50 minutes
 - 400 ppm after 4 to 15 minutes
- Flush or surface mount.
- Test functionality of electrochemical CO sensing cell.
- Connect to RJ45 or digital input sensor ports.
- Screw terminal
 - To connect to the RJ45 inputs use CAT5/5e/6 cable terminated at one end with RJ45 connector. Connect the un-terminated end to the sensor screw terminal.
- LED indicators for operation status and system test.
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: UL

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Motion/Intrusion/Vibration Sensors

Door Contact Sensor



ENVIROMUX-M-DCS

- Monitors access with a magnetic bridge sensor, which responds to any magnetic material (no special inserts necessary).
- Includes mounting hardware.
- For normally closed circuit connection.
- 2-wire interface, screw terminal
- Maximum cable length: 305 meters
- Wide actuating gap, approximately 25.4 mm.
- Dimensions WxDxH (mm): 12.7x12.7x50.8 (Switch), 12.7x12.7x50.8 (Magnet).
- Regulatory approvals: RoHS

Glass Break Detection Sensor



ENVIROMUX-GBS

- Acoustically detects the cracking of glass.
- Adjustable sensitivity.
- Includes mounting hardware.
- Connect to RJ45 or digital input sensor ports.
- Screw terminal
- Maximum cable length: 305 meters
- Powered by ENVIROMUX-SEMS-16.

Mini Infrared Motion Detector



ENVIROMUX-IMD-MW

- Detects movement across the detection field.
- Provides substantial immunity to false alarms caused by environmental disturbances.
- Pulse count or single shot triggering.
- Good RFI protection.
- Dimensions WxDxH (mm): 55.88x30.48x73.66
- Screw terminal
 - To connect to the RJ45 inputs use CAT5/5e/6 cable terminated at one end with RJ45 connector. Connect the un-terminated end to the sensor screw terminal.
- Maximum cable length: 305 meters
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS

Vibration Sensor



ENVIROMUX-VSS

- For registering movement / shocks.
- Adjustable sensitivity.
- Includes mounting hardware.
- Connect to RJ45 or digital input sensor ports.
- Screw terminal
- Maximum cable length: 305 meters
- Regulatory approvals: RoHS

Key Station



ENVIROMUX-RKS

- Remote key station designed for security system ON-OFF control applications.
- Built with universal connection terminals; can be used freely with most security systems.
- Provides momentary contact with spring return.
- Standard single gang mounting box.
- Built-in tamper switch.
- Built-in connection terminals.
- For security system and door strike applications.
- Dimensions WxDxH (mm): 43.18x73.66x116.84
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: RoHS

Infrared Motion Detector



ENVIROMUX-IMD

- Registers movement in the area covered.
- Condition display via LED.
- Provides immunity from common-mode signals such as the effect of strong hot or cold air currents, variation in ambient temperature, background radiation and acoustic noise.
- 24 dual-element detection zones for long, mid and short range protections.
- Pulse count or single shot triggering.
- Good RFI protection.
- Screw terminal
- Maximum cable length: 305 meters
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS



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Motion/Intrusion/Vibration Sensors (Continued)

Access Control Digital Keypad



ENVIROMUX-ACK

- Two relay outputs controlled by two groups of independent user codes.
- Normally closed and normally open dry contacts for both output relays.
- Terminal block for external connections.
- Single lock or inter-lock operation.
- Operate with fail-safe or fail-secure locking device.
- Non-volatile memory
- Duress output.
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS

Mounting Bracket for Infrared Motion Detector



ENVIROMUX-MB-IMD

- Mounting bracket for installing the infrared motion sensors to a ceiling or wall.
- 360° Angle Adjustment
- For use with the ENVIROMUX-IMD, ENVIROMUX-IMD-CM, and ENVIROMUX-IMD-MW motion detectors.

Emergency / Panic Button



ENVIROMUX-EBS

- Sends activation signal when button is pressed.
- For normally closed or normally open circuit connections.
- 2-wire interface.
- Screw terminal.
- Maximum cable length: 305 meters
- Dimensions WxDxH (mm): 10.16x22.86x76.2
- Regulatory approvals: RoHS

Infrared Motion Detector, Ceiling Mount



ENVIROMUX-IMD-CM

- Detects movement across the detection field.
- 360° detection pattern.
- 113° conical detection angle from ceiling.
- 11 m diameter protection when mounted 3.7 m high.
- Provides substantial immunity to false alarms caused by environmental disturbances.
- Pulse count or single shot triggering.
- Good RFI protection
- Screw terminal
- Maximum cable length: 305 meters
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS

Electric Strike



ENVIROMUX-EDR-SCR
ENVIROMUX-EDR-SF

- Fail-Safe Electric Strike (ENVIROMUX-EDR-SF)
 - The door is locked with power ON, and unlocked with power OFF.
 - For Fire/Emergency door or Escape door installations.
- Fail-Secure Electric Strike (ENVIROMUX-EDR-SCR)
 - The door is locked with power OFF, and unlocked with power ON.
 - For Entrance door installation.
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE

Light Intensity Sensor



ENVIROMUX-LIS

- Detects and measures the luminous intensity of light.
- Ideal for monitoring unmanned closets, telecom rooms, remote data rooms, or other low traffic facilities.
- Applications from 0 to 128,000 lux.
- Human eye response (540nm peak sensitivity).
- IR and UV rejection
- RJ45 connector.
- Supports CAT5/5e/6 cable up to 305 meters. (not included).
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: CE, RoHS
- Compatible with ENVIROMUX-SEMS-16.

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Alert/Communications Accessories

Alarm Beacon



ENVIROMUX-BCN-R

- Emits flashing red light when activated.
- Flash Rate: 90 per minute.
- Screw terminal.
- 2-wire interface.
- Input voltage: 12VDC.
- Maximum cable length: 30 meters
- Regulatory approvals: RoHS

Siren



ENVIROMUX-SRN-M

- Emits ear-piercing sound to deter intruders
- Output Level: 108 dB
- Dimensions WxDxH (mm): 38.1x43.18x60.96
- Screw terminal.
- 2-wire interface.
- Input voltage: 6-12VDC.
- Maximum cable length: 30 meters
- Regulatory approvals: RoHS

Automatic Voice/Pager Dialer System



ENVIROMUX-AVDS
ENVIROMUX-AVDS_LC

- ENVIROMUX-AVDS
 - Program up to 4 separate input channels with individual enable/disable, entry/exit delay and activation options.
 - Calls up to 8 telephones, pagers, or cell phones when a sensor goes out of range of a configurable threshold.
 - Stores up to 4 outgoing voice messages. Create a message for 4 different types of alarms.
 - Listen in on the area being monitored during outgoing message communication, or initiate a two-way conversation to detail the emergency condition.
- ENVIROMUX-AVDS-LC
 - Program one input channel.
 - Calls up to 4 telephones, pagers, or cell phones when a sensor goes out of range of a configurable threshold.
 - Deliver a recorded voice message of up to 30 seconds or a numeric code for pager messaging.
- For normally closed or normally open circuit connections.
- Interfaces with the ENVIROMUX-SEMS-16 via the Output Relay connections.
- Dimensions WxDxH (mm): 152x102x1.8
- Regulatory approvals: FCC

GSM Modem



ENVIROMUX-GSM

- Sends SMS text messages to a pager or cell phone when a sensor goes out of range of a configurable threshold.
- GSM modem with antenna built into system.
- Convenient push-push SIM card holder
 - Mini SIM card supporting SMS messaging required (not included)
- Protocols: AT commands
- Supports one configurable authorized phone number for sending SMS text messages.
- Auto PIN feature, no need to enter SIM card PIN after restart
- Powered by ENVIROMUX-SEMS-16.
- Quad band: 850/900/1800/1900 MHz
- SMS: Text mode

3G Serial Modem



ENVIROMUX-3G

- Sends SMS text messages to a cell phone when a sensor goes out of range of a configurable threshold.
- Removable antenna.
- Supports third generation (3G) digital cellular standards.
- Convenient push button SIM card holder.
 - Mini SIM card supporting 3G SMS messaging required (not included)
- Protocols: AT commands
- Supports one configurable authorized phone number for sending SMS text messages.
- Tri-band UMTS (HSDPA): 850/1900/2100 MHz
- Quad band EDGE/GPRS/GSM: 850/900/1800/1900 MHz
- Includes 12V/1A power supply.



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ENTERPRISE SERVER ENVIRONMENT MONITORING SYSTEM

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Power Relays & Sensors

AC Power Monitor with Relay



ENVIROMUX-ACLM-P12
ENVIROMUX-ACLM-P8

- Reports AC Voltage, Frequency, Power, and Current.
 - Monitors Power from one AC inlet to one AC outlet, between 50~250VAC and 47~63Hz.
 - Monitors the number of swells, sags, and spikes.
- Includes Relay with configurable disconnect settings: threshold reboot, or manual reboot.
- Outlet Max load rating:
 - ENVIROMUX-ACLM-P12 (US/Canada):
12A rated load, 15A maximum.
 - ENVIROMUX-ACLM-P8 (Euro/UK):
8A rated load, 10A maximum.
- Capable of measuring current surges to 60A.
- User defined minimum and maximum voltage and power thresholds.
- Capable of detecting user selected spike events with a peak greater than 50V, 250V, 500V, or 1KV.
- Supports CAT5/5e/6 cable up to 305 meters. (not included).
- Regulatory approvals: RoHS

3-Phase Power Transducer



ENVIROMUX-PT1M-208-0800
ENVIROMUX-PT3M-208-0800
ENVIROMUX-PT3S-480-0100

- Monitors and reports kW real power of any 3 phase circuit, such as the power a building consumes.
- Split-core design allows installation of CT without disconnecting conductor.
- Color coded CT and voltage leads.
- Smart electronics in sensors automatically detect phase reversal.
- Input primary voltage: 208/240 or 480 VAC RMS
- Number of phases monitored: one or three
 - Balanced Loads: one CT model (assumes single reading represents all phase currents)
 - Unbalanced Loads: three CT model, one black, red, and yellow.
- Frequency: 50/60Hz
- Maximum primary current: Up to 2400 amps continuous per phase
- Accuracy: +/- 1%
- Output: 4-20mA
- Supply power (current loop): 9-30VDC; 30mA max.
- Requires the ENVIROMUX-S420MA to operate.
- Caution: sensors tie directly into the line; should be used only by qualified personnel.

DC Voltage Detector



ENVIROMUX-S60VDC

- Monitors up to two DC voltages: -60VDC ~ 0VDC or 0VDC ~ 60VDC
- Connector: Screw Terminal, 5-position
- Supports CAT5/5e/6 cable up to 305 meters (not included)
- Includes mounting hardware
- Regulatory approvals: RoHS

AC Voltage Detector



ENVIROMUX-ACVD-515
ENVIROMUX-ACVD-C14

- Measurement range: detects voltage from 50 to 250 VAC.
- Measurement indication: Alarm or Normal.
- Sensor type: open/closed contact switch.
- Attached 0.9 meter power cord.
 - ENVIROMUX-ACVD-515: Standard US 120V 15A NEMA 5-15 plug
 - ENVIROMUX-ACVD-C14: Universal 250V IEC C14 socket
- Regulatory approvals: CE, RoHS

AC Dual Voltage Monitor



ENVIROMUX-ACLM-V

- Reports AC Voltage and Frequency.
 - Monitors AC voltage and frequency on two AC inlets between 50~250VAC and 47~63Hz.
 - Monitors the number of swells, sags, and spikes.
- User defined minimum and maximum voltage thresholds.
- Capable of detecting user selected spike events with a peak greater than 50V, 250V, 500V, or 1KV.
- Supports CAT5/5e/6 cable up to 305 meters. (not included).
- Regulatory approvals: RoHS

Remote Controlled Power Relay



ENVIROMUX-PWR-RLY-15A
ENVIROMUX-PWR-RLY-20A

- Use with ENVIROMUX-SEMS-16 to remotely turn off the power of an AC powered device.
 - Remotely reboot non-responsive computer systems.
- Two AC power receptacles.
- Load capacity:
 - ENVIROMUX-PWR-RLY-15A: 15A at 120VAC.
 - ENVIROMUX-PWR-RLY-20A: 20A at 120VAC.
- Dimensions WxDxH (mm): 96.5x50.8x139.7
 - The baseplate is 133 mm square.
 - Regulatory approvals: TÜV

ENTERPRISE SERVER ENVIRONMENT MONITORING SYSTEM

SNMP and Web monitoring/management of server room environments

Sensor Accessories

4-20mA Sensor Converter



ENVIROMUX-S420MA

- External RJ45 device monitors up to two 4-20mA analog sensors.
- Supports ISA Type 2, ISA Type 3, and ISA Type 4 sensors.
- Provides 18VDC, 25mA for each sensor.
- Connector: Screw Terminal, 8-position.
- Supports CAT5/5e/6 cable up to 305 meters (not included)
- Includes Mounting Hardware
- Powered by ENVIROMUX-SEMS-16.
- Regulatory approvals: RoHS.
- Compatible with ENVIROMUX-SEMS-16 only.

Sensor Cables



ENVIROMUX-2W-xx

- 2-wire sensor cable.
- Use to connect dry contact sensors to the ENVIROMUX-SEMS-16.
- Available lengths (m):
.9/1.8/3/7.6/15.2/30.5
- Regulatory approvals: RoHS, UL

