

# Environment Monitoring System

## ENVIROMUX®

### Feature Comparison



Product Feature	ENVIROMUX-16D	ENVIROMUX-5D	ENVIROMUX-2D	ENVIROMUX-MINI-LXO	ENVIROMUX-MICRO	ENVIROMUX-1W
<b>Internal/Integrated Sensors</b>	3	2	0	0	2	0
Temperature	✓ (internal)	✓ (internal)	N/A	N/A	✓ (integrated)	N/A
Humidity	✓ (internal)	✓ (internal)	N/A	N/A	✓ (integrated, optional)	N/A
Power	✓ (internal)	✓ (optional battery only)	✓ (optional battery only)	✓ (optional battery only)	N/A	N/A
<b>Sensor Ports – RJ45/RJ11</b>	16 RJ45	5 RJ45	2 RJ45	2 RJ45 For temperature/humidity only	2 RJ45 For temperature/humidity only	2 RJ11 (6P4C) For daisy-chaining 24 single-reading temperature/humidity/dew point, thermocouple, or digital input expanders
<b>Digital Inputs – Screw Terminal</b>	8	5	5	5	2	2
<b>Output Relays – Screw Terminal</b>	4	2	1	1	N/A	N/A
<b>Auxiliary (12V) Power Terminal</b>	✓	✓	✓	N/A	N/A	N/A
<b>Alerts</b>	10 Methods	9 Methods	9 Methods	8 Methods	5 Methods	5 Methods
Email	✓ Alerts sent to up to 17 email addresses	✓ Alerts sent to up to 17 email addresses	✓ Alerts sent to up to 17 email addresses	✓ Alerts sent to up to 17 email addresses	✓ Alerts sent to up to 9 email addresses	✓ Alerts sent to up to 9 email addresses
Web Page	✓	✓	✓	✓	✓	✓
SNMP traps	✓ - v1, v2c, v3	✓ - v1, v2c, v3	✓ - v1, v2c, v3	✓ - v1, v2c, v3	✓ - v1, v2c	✓ - v1, v2c
Syslog	✓	✓	✓	✓	✓	✓
LEDs	6 (Power, Low Battery, Check Log, Internal Sensor Alert, External Sensor Alert, Auxiliary)	2 (Power, Fault)	2 (Power, Fault)	2 (Power, Fault)	N/A	N/A
Alarm beacon	✓ (dedicated terminal)	✓ (one terminal for either purpose)	Can be connected (using output relay)	Can be connected (using output relay)	N/A	N/A
Siren	✓ (dedicated terminal)					
Voice Phone Calls	✓ - via Automatic Voice Dialer System (not included)	✓ - via Automatic Voice Dialer System (not included)	✓ - via Automatic Voice Dialer System (not included)	✓ - via Automatic Voice Dialer System (not included)	N/A	N/A
SMS Messages	✓ - via external USB 3G modem (not included) Alerts sent to up to 17 numbers	✓ - via external USB 3G modem (not included) Alerts sent to up to 17 numbers	✓ - via external USB 3G modem (not included) Alerts sent to up to 17 numbers	✓ - via external USB 3G modem (not included) Alerts sent to up to 17 numbers	✓ - email-to-SMS alerts	✓ - email-to-SMS alerts
Android/iOS App	✓ - optional	✓ - optional	✓ - optional	N/A	N/A	N/A
<b>Smart Alerts</b>	20	20	20	20	1	1
<b>IP Cameras</b>	✓ - up to 8 cameras	✓ - up to 8 cameras	✓ - up to 8 cameras	✓ - up to 8 cameras	✓ - up to 4 cameras	✓ - up to 4 cameras
<b>Alarm Triggered IP Camera Snapshots Emailed</b>	✓	✓	✓	✓	N/A	N/A
<b>Alarm Silence/Test Button</b>	✓	✓	N/A	N/A	N/A	N/A

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<b>Control Methods</b>	6 Methods	6 Methods	5 Methods	5 Methods	3 Methods	3 Methods
Web Interface	✓	✓	✓	✓	✓	✓
Telnet	✓	✓	✓	✓	✓ - monitoring only	✓ - monitoring only
SNMP Monitoring	✓ - v1, v2c, v3	✓ - v1, v2c, v3	✓ - v1, v2c, v3	✓ - v1, v2c, v3	✓ - v1, v2c	✓ - v1, v2c
SSH	✓	✓	✓	✓	N/A	N/A
USB-to-Serial Console	✓	✓	✓	✓	N/A	N/A
RS232 (DCE) Console	✓	✓	N/A	N/A	N/A	N/A
<b>USB Ports for Modem and/or Data Logging</b>	4	4	2	2	reserved for future use	reserved for future use
<b>Flash Upgrade</b>	✓	✓	✓	✓	✓	✓
<b>Linux Inside</b>	✓	✓	✓	✓	N/A	N/A
<b>Restore Defaults Button</b>	✓	✓	✓	✓	N/A	✓
<b>System Reset Button</b>	✓	✓	✓	✓	N/A	N/A
<b>Protocols</b>	HTTP/HTTPS, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSHv2, SSLv3, LDAPv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, IPV6, WAP 2.0, RADIUS	HTTP/HTTPS, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSHv2, SSLv3, LDAPv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, IPV6, WAP 2.0, RADIUS	HTTP/HTTPS, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSHv2, SSLv3, LDAPv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, IPV6, WAP 2.0, RADIUS	HTTP/HTTPS, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSHv2, SSLv3, LDAPv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, IPV6, WAP 2.0	HTTP/HTTPS, SNMP V1/V2c, SMTP, TCP/IP, Syslog, SNTP, DHCP, TLS v1.2, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour	HTTP/HTTPS, SNMP V1/V2c, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSLv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour
<b>Operating Temperature</b>	32°F to 100°F (0°C to 38°C)	E-5D: 32 to 140°F (0 to 60°C) E-5DB: 32 to 104°F (0 to 40°C) E-5DB-IND: 32 to 140°F (0 to 60°C)	32°F to 100°F (0°C to 38°C)	32°F to 104°F (0°C to 40°C) Optional industrial model: 32°F to 167°F (0°C to 75°C).	-4 to 167°F (-20 to 75°C)	-4 to 167°F (-20 to 75°C)
<b>Storage Temperature</b>	-22°F to 140°F (-30°C to 60°C)	E-5D: -22 to 140°F (-30 to 60°C) E-5DB-IND: -4 to 176°F (-20 to 80°C)	-22°F to 140°F (-30°C to 60°C)	-20°F to 176°F (-20°C to 80°C)	-4 to 167°F (-20 to 75°C)	-4 to 167°F (-20 to 75°C)
<b>Operating &amp; Storage Relative Humidity</b>	17 to 90% non-condensing RH	17 to 90% non-condensing RH	17 to 90% non-condensing RH	17 to 90% non-condensing RH	0 to 90% non-condensing RH)	0 to 90% non-condensing RH
<b>Backup Battery</b>	✓ - up to 1 Hour	Optional – up to 2 Hours	Optional – up to 2 Hours	Optional – up to 2 Hours	N/A	N/A
<b>Monitor (Ping) IP Devices</b>	✓ - up to 64 network devices	✓ - up to 64 network devices	✓ - up to 64 network devices	✓ - up to 16 network devices	✓ - up to 4 network devices	✓ - up to 4 network devices
<b>Power</b>	<ul style="list-style-type: none"> <li>• 110 or 230 VAC at 50 or 60 Hz via IEC connector.</li> <li>• Options: dual AC power, 24VDC, dual 24VDC 48VDC, dual 48VDC . <ul style="list-style-type: none"> <li>o 24V options: accepts 20~32VDC</li> <li>o 48V options: accepts 36~72VDC</li> <li>o Dual power options: second power supply sold separately.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 110 or 220 VAC at 50 or 60 Hz via AC adapter.</li> <li>• Options: dual AC power, 48VDC . <ul style="list-style-type: none"> <li>o 48V option: accepts 18~72VDC.</li> <li>o Dual power options: second power supply sold separately.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 110 or 220 VAC at 50 or 60 Hz via AC adapter.</li> <li>• Options: dual AC power, 24VDC . <ul style="list-style-type: none"> <li>o 24V option: accepts 9~36VDC.</li> <li>o Dual power options: second power supply sold separately.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 110 or 220 VAC at 50 or 60 Hz via AC adapter</li> </ul>	<ul style="list-style-type: none"> <li>• 110 or 240 VAC at 50 or 60 Hz via AC adapter.</li> <li>• E-MICRO-T: Dual DC power (Second power supply sold separately).</li> <li>• E-MICRO-TRH: Power over Ethernet (PoE), Dual DC power (AC adapters not included, sold separately).</li> </ul>	<ul style="list-style-type: none"> <li>• 110 or 240 VAC at 50 or 60 Hz via AC adapter.</li> <li>• ENVIROMUX-1W: Dual DC power (Second power supply sold separately)</li> <li>• ENVIROMUX-1WP: Power over Ethernet (PoE), Dual DC power (AC adapters not included, sold separately)</li> </ul>

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Languages Supported:	English, German, Chinese, Japanese	English, German, Chinese, Japanese	English, German, Chinese, Japanese	English	English	English
MTBF	39,685 hours	170,344 hours	229,580 hours	274,783 hours	648,857 hours	703,871 hours
Dimensions WxDxH (in)	Without supplied rackmount kit : 16.19x10.01x1.75 With supplied rackmount kit: 19x10.01x1.75	E-5D: 7.88x3x1.75 E-5D-48V: 10.25x3.1x1.75 E-5DB-IND: 10.25x3.1x1.75	5.82x3x1.75	5.82x3x1.75	4x3.44x1.37	4x3.65x1.37
Mounting	1RU	<ul style="list-style-type: none"> <li>Zero-RU – mounting tabs included</li> <li>Optional 1RU mounting kit</li> <li>Optional DIN rail mounting kit</li> </ul>	<ul style="list-style-type: none"> <li>Zero-RU – mounting tabs included</li> <li>Optional 1RU mounting kit</li> <li>Optional DIN rail mounting kit</li> </ul>	<ul style="list-style-type: none"> <li>Zero-RU – mounting tabs included</li> <li>Optional 1RU mounting kit</li> <li>Optional DIN rail mounting kit</li> </ul>	<ul style="list-style-type: none"> <li>Mounting hole to match rack hole spacing</li> </ul>	<ul style="list-style-type: none"> <li>Mounting hole to match rack hole spacing</li> </ul>
Regulatory Approvals	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS
Warranty	2 years	2 years	2 years	2 years	2 years	2 years
Expandable	✓	✓	✓	✓	✓	✓
Management Software	<ul style="list-style-type: none"> <li>✓ - Optional (ENVIROMUX-MNG-xxxx)</li> <li>Monitor and configure up to 3,000 ENVIROMUX-2D/5D/16D units</li> <li>Graph trends</li> <li>Mass configuration</li> <li>View real-time sensor values</li> <li>Remotely power down devices by adding Remote Power Control Units</li> <li>Scrolling sensor summary pages for a specific unit, all units, or a pre-configured group of units.</li> </ul>	<ul style="list-style-type: none"> <li>✓ - Optional (ENVIROMUX-MNG-xxxx)</li> <li>Monitor and configure up to 3,000 ENVIROMUX-2D/5D/16D units</li> <li>Graph trends</li> <li>Mass configuration</li> <li>View real-time sensor values</li> <li>Remotely power down devices by adding Remote Power Control Units</li> <li>Scrolling sensor summary pages for a specific unit, all units, or a pre-configured group of units.</li> </ul>	<ul style="list-style-type: none"> <li>✓ - Optional (ENVIROMUX-MNG-xxxx)</li> <li>Monitor and configure up to 3,000 ENVIROMUX-2D/5D/16D units</li> <li>Graph trends</li> <li>Mass configuration</li> <li>View real-time sensor values</li> <li>Remotely power down devices by adding Remote Power Control Units</li> <li>Scrolling sensor summary pages for a specific unit, all units, or a pre-configured a group of units.</li> </ul>	N/A	<ul style="list-style-type: none"> <li>✓ - Optional (ENVIROMUX-MNG-LC)</li> <li>Monitor and configure up to 3,000 ENVIROMUX-MICRO and ENVIROMUX-1W (coming soon) units</li> <li>Graph trends</li> <li>Mass configuration</li> <li>View real-time sensor values</li> <li>Remotely power down devices by adding Remote Power Control Units</li> <li>Scrolling sensor summary pages for a specific unit, all units, or a pre-configured group of units.</li> </ul>	Coming Soon
Cascade	<ul style="list-style-type: none"> <li>✓ - Optional</li> <li>Up to 5 units Ethernet (1 master, 4 slaves)</li> </ul>	<ul style="list-style-type: none"> <li>✓ - Optional</li> <li>Up to 5 units Ethernet (1 master, 4 slaves)</li> </ul>	<ul style="list-style-type: none"> <li>✓ - Optional</li> <li>Up to 5 units Ethernet (1 master, 4 slaves)</li> </ul>	N/A	<ul style="list-style-type: none"> <li>✓ - Optional</li> <li>Use as standalone unit or as an IP-connected remote sensor for the ENVIROMUX-2D/5D/16D</li> </ul>	<ul style="list-style-type: none"> <li>✓ - Optional</li> <li>Use as standalone unit or as an IP-connected remote sensor for the ENVIROMUX-2D/5D/16D</li> </ul>

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<b>Additional Sensor Ports (not included)</b>	<p>Up to 16 ENVIROMUX-DI16DO16 or ENVIROMUX-DI16DOR16 units</p> <ul style="list-style-type: none"> <li>• ENVIROMUX-DI16DO16                             <ul style="list-style-type: none"> <li>o 16 digital inputs</li> <li>o 16 output relays (open-collector)</li> </ul> </li> <li>• ENVIROMUX-DI16DOR16                             <ul style="list-style-type: none"> <li>o 16 digital inputs</li> <li>o 16 output relays (N.O.)</li> </ul> </li> </ul>	<p>Up to 16 ENVIROMUX-DI16DO16 or ENVIROMUX-DI16DOR16 units</p> <ul style="list-style-type: none"> <li>• ENVIROMUX-DI16DO16                             <ul style="list-style-type: none"> <li>o 16 digital inputs</li> <li>o 16 output relays (open-collector)</li> </ul> </li> <li>• ENVIROMUX-DI16DOR16                             <ul style="list-style-type: none"> <li>o 16 digital inputs</li> <li>o 16 output relays (N.O.)</li> </ul> </li> </ul>	<p>Up to 16 ENVIROMUX-DI16DO16 or ENVIROMUX-DI16DOR16 units</p> <ul style="list-style-type: none"> <li>• ENVIROMUX-DI16DO16                             <ul style="list-style-type: none"> <li>o 16 digital inputs</li> <li>o 16 output relays (open-collector)</li> </ul> </li> <li>• ENVIROMUX-DI16DOR16                             <ul style="list-style-type: none"> <li>o 16 digital inputs</li> <li>o 16 output relays (N.O.)</li> </ul> </li> </ul>	N/A	N/A	<p>Daisy-chain compatible sensors in any combination</p> <ul style="list-style-type: none"> <li>• Up to 24 temperature, thermocouple, or any single-reading 1-wire sensor can be connected</li> <li>• Up to 8 temperature/humidity/dew point combination 1-wire sensors can be connected</li> <li>• Up to 12 ENVIROMUX-DI2-1W digital input expanders can be connected to allow a maximum of 24 additional digital inputs.</li> </ul>
<b>Starting Price</b>	\$1,215	\$520	\$370	\$305	\$185	\$162