

Environmental Monitoring and Management System



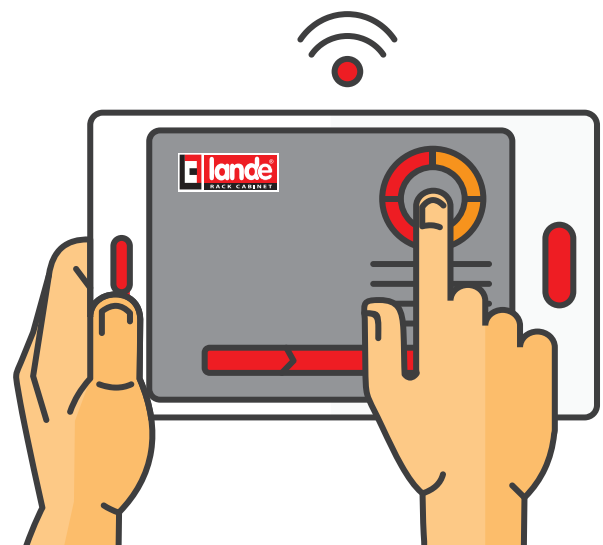
What is EMS?

Environmental Management System is a set of processes and practices that enable an organization to monitor the external environmental factors, reduce the undesired environmental impacts and increase operating efficiency.



Advantages

- Enhanced environmental monitoring
- Remote monitoring of multiple sites
- Improved and controllable compatibility
- High security and internal audit capacity
- Enhanced efficiency resulting in reduced costs
- Reduced human resources dependency
- Systematic data analysis
- Corrective and preventive actions
- Instant and retrospective reporting
- Raised awareness on environmental impacts



Lande EMS MINI 201

Remote Cabinet Control System With Camera

Lande EMS MINI 201 is a device which measures, observes, saves and controls environmental variables such as temperature, humidity, air quality, door position, leakage etc. Captures unauthorised entries and sends alarms to administrators.

Lande EMS MINI 201 is a standalone solution which is able to operate independently without any connection to a server or a computer network. It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards.



Lande EMS MINI 201 can easily be added to local networks through LAN Ethernet connection.

- **Lande EMS MINI 201** gives secure access to the data center and allows remote monitoring all over the World by a unique Web interface. System notifications and alarms, instantly conveys information to administrators via various options like e-mails, SMS and SNMP trap. All the data and logs from sensors can be saved to be used for further reporting and analysis. The data collected by **EMS MINI 201** is secured with advanced encryption algorithms.

- IP based location detection
- Internal temperature and humidity sensor
- External temperature sensor
- Photo capturing and sharing feature via camera in case of an authorised entry or attempted sabotage
- SMS notification in case of an alarm situation
- Ability to keep logs of the doors status (open-closed) and activate alarms system
- Adjustable lower-upper limits for warning system
- ± 1 °C accuracy
- Retrospective reporting for analysis
- Ability of setting desired parameters online
- Online software updates

Lande EMS MINI 201

Remote Cabinet Control System With Camera



EMS MINI 201 TECHNICAL SPECIFICATIONS

Dimensions	110 x 76 x 27 mm
Weight	210 gr
Voltage	5 Volt
Current	800 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Temperature unit	°C
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door Sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
Leakage	External leak sensor
Camera	Photo taking and sending upon desire
Protocols	HTTP, HTTPS, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional

Lande EMS MINI 301

Remote Cabinet Control System

Lande EMS MINI 301 is a device which measures, observes, saves and controls environmental variables such as temperature, humidity, air quality, door position, leakage etc. Integrated LCD screen displays measured data instantaneously.

Lande EMS MINI 301 is a standalone solution which is able to operate independently without any connection to a server or a computer network, easy to install, flexible, safe and compatible with other sensors meeting industrial standards.



Lande EMS MINI 301 can easily be added to local networks through LAN Ethernet connection.

Lande EMS MINI 301 gives secure access to the data center and allows remote monitoring all over the World by a unique Web interface. System notifications and alarms instantly convey information to administrators via various options like e-mails, SMS and SNMP trap. All the data and logs from sensors can be saved to be used for further reporting and analysis. The data collected by EMS MINI 301 are secured with advanced encryption algorithms.

- IP based location detection
- Ability to show alarms and instant data via its internal LCD screen
- Internal temperature and humidity sensor
- External temperature sensor
- External air quality sensor
- SMS notifications in case of an alarm situation
- Ability to keep logs of the doors status (open-closed) and activate alarms system
- Adjustable lower-upper limits for warning system
- ± 1 °C accuracy
- Retrospective reporting for analysis
- Ability of setting desired parameters online
- Online software updates

Lande EMS MINI 301

Remote Cabinet Control System



EMS MINI 301 TECHNICAL SPECIFICATIONS

Dimensions	110 x 76 x 27 mm
Weight	210 gr
Voltage	5 Volt
Current	950 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Temperature and humidity	Internal temperature and humidity sensor
GSM identification	Yes
Protocols	HTTP, HTTPS, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional

Lande EMS 401

Environmental Monitoring and Management System



Connection up to 10 cabinets with EMS CSS Combo Modules. For wider networks, please consult to Lande sales representatives.

Lande EMS 401 is a device which measures, monitors, saves and controls environmental variables such as temperature, humidity, smoke, air flow etc.

Lande EMS 401 is a standalone solution which is able to operate independently without any connection to a server or a computer network. It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards.

Lande EMS 401 supports RS485 communication standards for integration with other industrial devices like UPS, generator, air conditioners etc.

The network can be extended by adding up to 10 min combo module to standard RS485 ports of **Lande EMS 401** and you can easily add it to your local network.

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to RS485 ports of **Lande EMS 401**.

Lande EMS 401

Environmental Monitoring and Management System



EMS 401 TECHNICAL SPECIFICATIONS

Dimensions	190 x 105 x 35 mm
Weight	480 gr
Voltage	12 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
GSM identification	Yes
Leakage	One wire leak sensor
One wire distance	Maximum 50 meters
Digital input	6 input
Digital output	2 output
Analogue input	6 input
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional
Siren	Yes

Lande EMS 501

Environmental Monitoring and Management System



Connection up to 10 cabinets with EMS CSS Combo Modules. For wider networks, please consult to Lande sales representatives.

Lande EMS 501 is a device which measures, monitors, records and controls environmental variables such as temperature, humidity, smoke, air flow etc.

Lande EMS 501 is a standalone solution which is able to operate independently without any connection to a server or a computer network. It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards.

Lande EMS 501 supports RS485 communication standards for integration with other industrial devices like UPS, generator, air conditioners etc. You can extend the coverage of your EMS System with the sensor multiplexer HUB that you will connect to the sensor port.

Lande EMS 501 can easily be added to local networks through LAN Ethernet connection. Moreover, you can connect a compatible 3G modem through the USB port for connection (USB 3G modem is not included to shipment configuration).

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to digital output connectors of **Lande EMS 501**.

Lande EMS 501 gives secure access to the data center and allows remote monitoring all over the World by a unique Web interface. System notifications and alarms instantly convey information to administrators via various options like e-mails, SMS, phone call and SNMP trap.

All the data and logs from sensors can be saved to be used for further reporting and analysis. The data collected by **Lande EMS 501** is secured with advanced encryption algorithms.

A compatible IP camera or USB Web camera can be connected to Lande EMS 501 to remote live video surveillance. System can be programmed to take and e-mail pictures when desired.

Lande EMS 501

Environmental Monitoring and Management System



EMS 501 TECHNICAL SPECIFICATIONS

Dimensions	380 x 105 x 35 mm
Weight	480 gr
Voltage	12 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
Screen	2x16 LCD screen
GSM identification	Yes
Digital input	8 input
Digital output	3 output
Analogue input	8 input
Camera connection	Yes
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional
Siren	Yes
USB cam support	Yes

Lande EMS 601

IoT Module Control System



Lande EMS 601 is a device which measures monitors, records and controls environmental variables, such as fan frequency, fan state, temperature, humidity, smoke, air flow etc.

Lande EMS 601 is a standalone solution which is able to operate independently without any connection to a server or a computer network.

It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards. Wi-Fi feature allows wirelessly connect sensors.

Lande EMS 601 can easily be added to local networks through LAN Ethernet connection.

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to digital output connectors of **Lande EMS 601**.

Lande EMS 601 allows you to access temperature and humidity maps of data centers while providing power consumption statistics. EMS software records entry/exit logs. EMS gathers the data from sensors and uploads to the cloud while creating trend charts. Parameters can be set to allow, alerts via e-Mail, SMS, SNMP Trap or Siren. Which allows remote and early diagnosis of the situations.

Lande EMS 601

Iot Module Control System



EMS 601 TECHNICAL SPECIFICATIONS

Dimensions	212 x 90 x 59 mm
Weight	465 gr
Voltage	220 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Wireless connection	Wifi
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
Leakage	One Wire Leak sensor
Smoke sensor	Yes
Dry contact	6
Digital input	8
Digital output	8
TC-IP connection	Rj 45 Ethernet
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional

Lande EMS 701

Environmental Monitoring and Management System

Lande EMS 701 is a device which measures, monitors, records and controls environmental variables such as temperature, humidity, smoke, air flow etc.

Device can be connected to a screen with Linux support. Devices and applications can be remotely managed by a computer or tablet.

Lande EMS 701 is a standalone solution which is able to operate independent without any connection to a server or a computer network. Its easy to install, flexible, safe and compatible with other sensors meeting industrial standards.



Lande EMS 701 supports RS485 communication standards for integration with other industrial devices like UPS, generator, air conditioners etc. You can extend the coverage of your EMS System with the sensor multiplexer HUB that connects to the sensor port.

Lande EMS 701 can easily be added to local networks through LAN Ethernet connection. Moreover, you can connect a compatible 3G modem through the USB port for connection (USB 3G modem is not included to shipment configuration).

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to digital output connectors of **Lande EMS 701**.

Lande EMS 701 gives secure access to the data center and allows remote monitoring all over the World by a unique Web interface. System notifications and alarms instantly convey information to administrators via various options like e-mails, SMS, phone call and SNMP trap.

All the data and logs from sensors can be saved to be user for further reporting and analysis. The data collected by **Lande EMS 701** is secured with advanced encryption algorithms.

A compatible IP camera or USB Web camera can be connected to **Lande EMS 701** to remote live video surveillance. System can be programmed to take and e-mail pictures when desired.

Lande EMS 701

Environmental Monitoring and Management System



EMS 701 TECHNICAL SPECIFICATIONS

Dimensions	200 x 100 x 35 mm
Weight	480 gr
Voltage	12 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
GSM identification	Yes
Digital input	8 input
Digital output	3 output
Analogue input	8 input
Camera connection	Yes
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional
Siren	Yes
USB cam support	Yes

Lande EMS CSS COMBO MODULE

Environmental Monitoring and Management System



Lande EMS CSS COMBO MODULE is a device which measures, monitors, records and controls environmental variables such as temperature, humidity, air quality, air flow etc.

Lande EMS CSS COMBO MODULE is a standalone solution which is able to operate independently without any connection to a server or a computer network.

It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards.

Lande EMS CSS COMBO MODULE supports RS485 communication standards for integration with other industrial devices like UPS, generator, air conditioners etc.

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to RS485 ports of **Lande EMS CSS COMBO MODULE**.

Lande EMS CSS COMBO MODULE

Environmental Monitoring and Management System



EMS CSS COMBO MODULE TECHNICAL SPECIFICATIONS

Dimensions	75 x 53 x 19 mm
Weight	110 gr
Voltage	5 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensors	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
GSM identification	Yes
Digital input	Supported up to 4 input
Digital output	1 output
Analogue input	2 input
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional
Siren	Optional

Lande EMS FCS 201

Fan Control System



Lande EMS FCS 201 is a device which measures, monitors, records and controls environmental variables such as fan frequency, fan state, temperature, humidity, smoke, air flow etc.

Lande EMS FCS 201 is a standalone solution which is able to operate independently without any connection to a server or a computer network.

It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards.

Lande EMS FCS 201 can easily be added to local networks through LAN Ethernet connection.

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to digital output connectors of **Lande EMS FCS 201**.

Lande EMS FCS 201 allows you to access temperature and humidity maps of data centers while providing power consumption statistics. EMS software records entry/exit logs. EMS gathers the data from sensors and uploads to the cloud while creating trend charts. Parameters can be set to allow alerts via e-Mail, SMS, SNMP Trap or Siren. Which allows remote and early diagnosis of the situations.

Lande EMS FCS 201

Fan Control System



EMS FCS 201 TECHNICAL SPECIFICATIONS

Dimensions	122 x 72 x 35 mm
Weight	250 gr
Voltage	220 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
GSM number	Yes
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
Leakage	One Wire Leak sensor
Smoke sensor	Yes
Dry contact	4
Fan connection input	4
Fan connection output	4
TC-IP connection	Rj 45 Ethernet
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional

Lande EMS FCS 301

Fan Control System



Lande EMS FCS 301 is a device which measures monitors, records and controls environmental variables such as fan frequency, fan state, temperature, humidity, smoke, air flow etc.

Lande EMS FCS 301 is a standalone solution which is able to operate independently without any connection to a server or a computer network.

It's easy to install, flexible, safe and compatible with other sensors meeting industrial standards.

Lande EMS FCS 301 can easily be added to local networks through LAN Ethernet connection.

Other electrical devices, like air conditioners, ventilation fans etc., can be turned on and off by connecting them to digital output connectors of **Lande EMS FCS 301**.

Lande EMS FCS 301 allows you to access temperature and humidity maps of data centers while providing power consumption statistics. EMS software keeps entry/exit logs. EMS gathers the data from sensors and uploads to the Cloud while creating trend charts. Parameters can be set to allow alerts via e-Mail, SMS, SNMP Trap or Siren. Which allows remote and early diagnosis of the situations.

Lande EMS FCS 301

Fan Control System



EMS FCS 301 TECHNICAL SPECIFICATIONS

Dimensions	200 x 87 x 30 mm
Weight	465 gr
Voltage	220 Volt
Current	500-2000 mA
Communication protocol	Communication via standard TCP IP structure or GPRS
Communication compatibility	TS EN 61000-6-2
Protection class	IP 44
Warranty	2 years
Measurement precision	±2% standard
Device operating limits	Temperature: -20°C - 80°C, Humidity: up to 85% RH
Temperature measurement range	0 °C - 80°C (±1)
Relative humidity measurement range	0 - 95% RH (±3)
Measurement frequency	750 ms
GSM number	Yes
Transmission frequency	Adjustable transmission frequency
Limit adjusting	Adjustable upper-lower limits
Door sensor	Magnetic sensor (optional)
Temperature and humidity	Internal temperature and humidity sensor
Leakage	One Wire Leak sensor
Smoke sensor	Smoke sensor
Dry contact	4
Fan connection input	6
Fan connection output	6
TC-IP connection	Rj 45 Ethernet
Protocols	HTTP, HTTPS, SNMP Traps, Modbus, FTP, SSH, Telnet
Emergency e-mail	Yes
Emergency SMS	Optional

Lande EMS

Accessories and Sensors

Camera - LN-EMS-CAMS

Captures sabotage attempts and unauthorised entries and sends images to EMS system.



Smoke Sensor - LN-EMS-SS

Used for detection of fires in advance to activates emergency system. Sensor should be located to a high and central location within the cabinet for the best fast results for detection of smoke and high temperature.



Leak Sensor - LN-EMS-LS

Detects water/liquid leakages in the environment to activate alarm system. Sensor works even if the alarms is turned off.



Temperature and humidity Sensor - LN-EMS-HHS

An advanced temperature and humidity sensor. Highly reliable and convenient for in long term usage.



Leak Sensor (Rope Type) - LN-EMS-RTLS

A device which constantly monitors water/liquid leakages.



Lande EMS

Accessories and Sensors

Air Quality Sensor - LN-EMS-AQS

Detects oxidizable (ignitable) gases: body odour, cigarette smoke, gasses as a result of fire other materials (furniture, carpets, paint coatings, adhesives etc).



Flasher Siren - LN-EMS-FSS

Warning buzzer which is developed for smart addressable systems and works with all 12 Volt outputs



Information Display - LN-RMS-MINI-001

A display which receives, processes and shows data from sensors.



Energy Analyser - LN-EMS-EA

A device which provides continuous monitoring of the electric energy, keeps measurement logs and disseminates the results with remote devices when requested.



GSM Module - LN-EMS-GSM

A module which allows you to communicate via GSM network where internet lines are unavailable.





CONTACT DETAILS

Headquarters

Address:

Merve Mah. Gazi Cad. No: 17 **Phone:** +90 216 312 26 53 pbx
Sancaktepe - İstanbul / TURKEY **Fax** : +90 216 312 09 09

Factory

Address:

20. Cadde No: 14 Eskişehir **Phone:** +90 222 236 24 66 pbx
Organize San. Bölge. 26110 **Fax** : +90 222 236 13 53
Eskişehir / TURKEY

www.lande.com.tr | sales@lande.com.tr

