

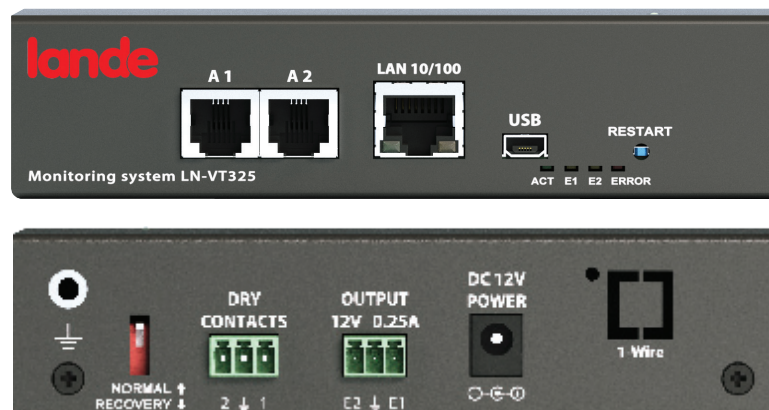


Monitoring system LN-VT325

Environmental monitoring of small facilities, access control, monitoring of temperatures, smoke, water leakages, voltages and more.

Overview

LN-VT325 is used for environment monitoring (room temperature, humidity, leakage, voltage, vibration, access, smoke, ...), notifications (SNMP, E-mail, Video, Alarm beacons, SMS (USB modem is not included)) and control of cabinets, data centers, outdoor cabinets, telecom sites and other mission critical facilities.



HARDWARE:

- 2 AutoSense RJ-12 ports for analog sensors
- 2 dry contact inputs (terminal plug included)
- HS USB port for web camera
- LEDs: power, relays, alarm
- 2*12V 0.25A outputs / relays
- 1-Wire extension (LN-VT10 / board ordered separately)
- 100 Mbit Ethernet port
- DC 12V power input
- External earthing

SOFTWARE:

- Web interface
- Virtual sensors & elements: Group, E-mail, SNMP trap, SNMP Get, SMS, IP cams, PINGs, Triggers, Timers
- SNMP traps, SMS & E-mail notifications
- Supports SNMP v.1, v.2c, v.3
- Notifications: E-mail, SMS, Syslog, Event log, SNMP Trap, SNMP Get
- Configurable embedded logic
- Sensor graphing
- Multilanguage support
- User Access and Permissions

OTHER:

- 1 Year warranty
- Manufactured in E.U.

LN-VT325 has a Linux OS running an 300 MHz ARM CPU. It is TCP / IP compliant and runs lighttpd web server including HTTPS (SSL), SMTP, DHCP, SNMP, FTP, Syslog, Radius. Web interface is mobile ready and runs on HTML5.

Multilanguage interface

Web interface is has a multilanguage GUI and can be customized at request.

SNMP

All SNMP functions including SNMP v.1, v.2c, v.3 are supported.

LN-VT325 has a Built-in Watchdog timer with NTP synchronisation.

SNMP Get function supported.

Duplicator program

Easy-to-use Replica programm allows the user to setup all SNMP units within minutes. This program is designed to clone the unit settings and units firmware update. This is needed in case you have multiple units and it is required to copy all or some of the settings of one unit to other units.

5-level sensor thresholds

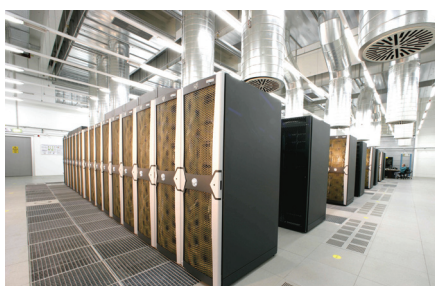
Sensors with 5-level thresholds allows direct connection to the SCADA system. The thresholds are usually: very low, low, normal, warning and alarm. Sensor levels can be inverted.

Processor: ARM926EJ 300 MHz
OS: Linux 3.10.32
ROM: 512 Mbit NAND Flash
RAM: 64 Mb
Operating temperature: 0 to 60 °C
Storage temperature: -25 to 85 °C
Operating humidity: 0 to 90 %, non-condensing
Storage humidity: 0 to 95 %, non-condensing

Ethernet 10/100 Mbit port
Built-in clock with time synchronization
RADIUS access with Login
Device Management: Web, SNMP, manually via SMS (Using external USB modem)
Built-in watchdog timer
Alert types: FTP, Syslog, SMTP or SNMP, SMS (Using external USB modem)
Network protocols: DHCP, HTTP, HTTPS, SNMP, SMTP, SSL, FTP, Syslog, CAN, Get SNMP, TLS

Connect up to 4 IP Cameras

LN-VT325 can display pictures from a maximum of four IP cams simultaneously in several sizes, up to 640x480 pixels resolution.



Configurable logic

Web interface allows you to set up logic rules for alerts, notifications & actions to avoid unplanned downtime due to overdrawn circuits.

Add new logic scheme ×

Scheme name

Disable scheme no ▼

Action	Element	State	Timeout	Repeat	Operator
IF	Analog-5 ▼	high alarm ▼	not used	not used	OR ▼
IF	Dry-3 ▼	alarm ▼	not used	not used	OR ▼
IF	Dry-2 ▼	alarm ▼	not used	not used	THEN ▼
THEN	Analog Power ▼	on ▼	none ▼	once	AND ▼
THEN	Power-1 ▼	on ▼	none ▼	once	END ▼

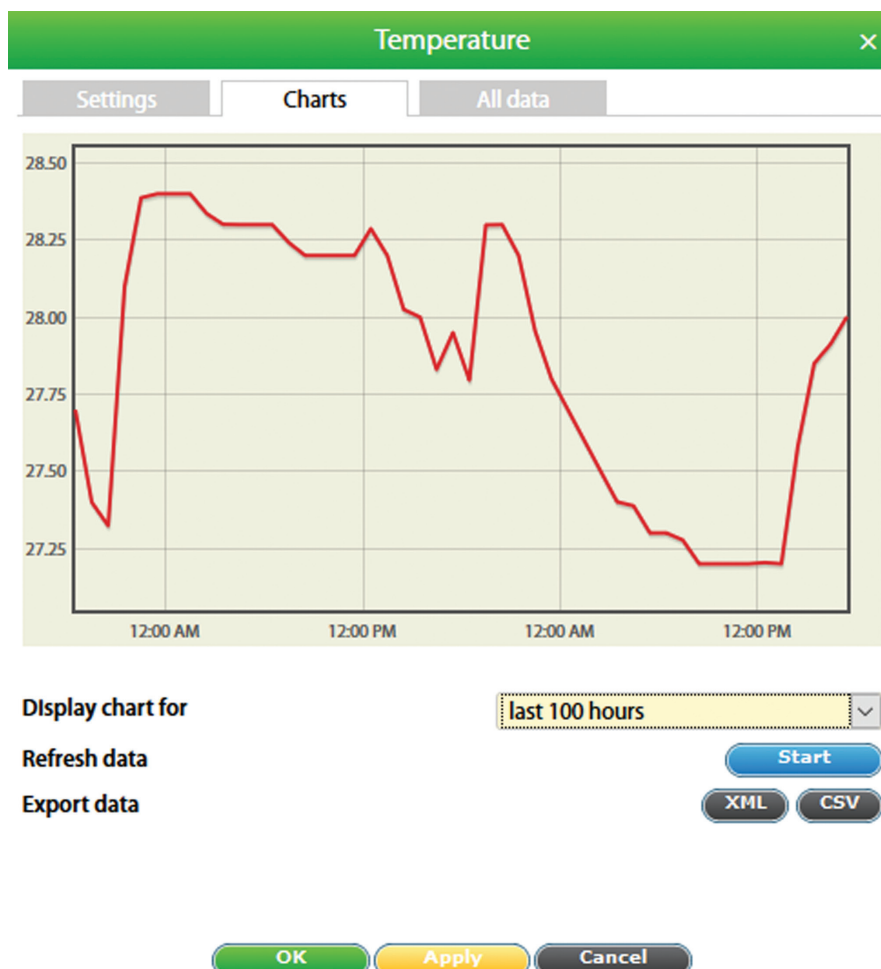
OK
Cancel

Virtual elements

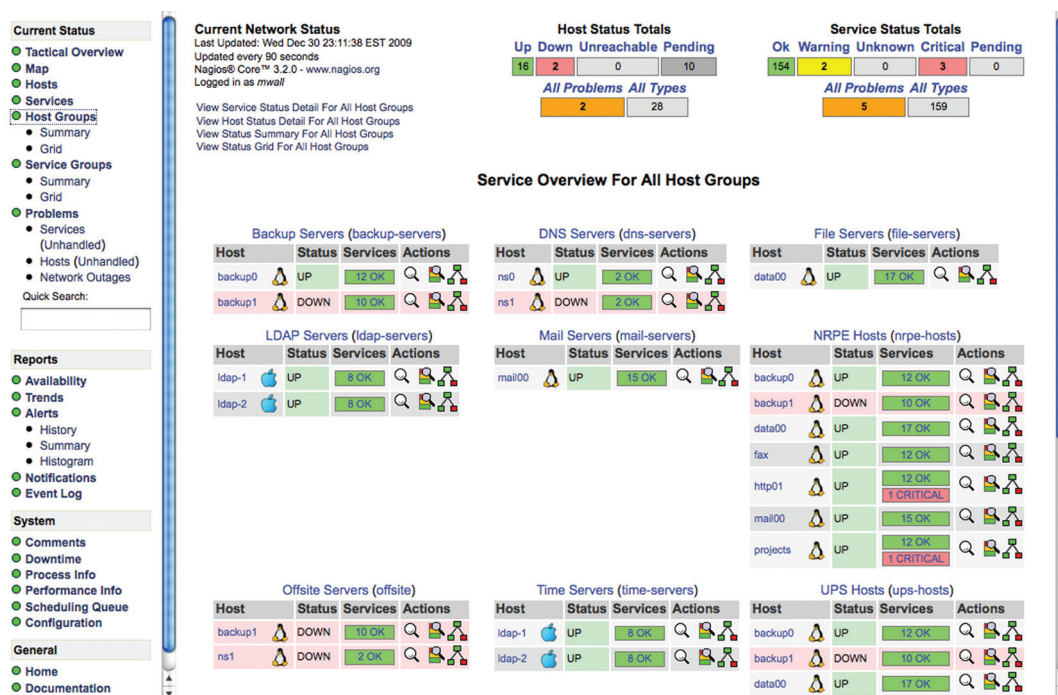
- E-mail
- SNMP trap
- SMS notifications (USB modem is not included)
- Timers
- Triggers
- Pings
- IP Cams
- Groups
- Get SNMP

Sensor Graphing

GUI integrates and displays graphs of all sensor data. The individual graph (seconds, minutes, hours, days) for each sensor type can be selected. RRD tool is used to build an embedded database of sensor data. This data can be accessed in interface, or downloaded to Syslog or to FTP or saved on SD card. You can compare sensor data using a Multiplot by plotting a few sensor data along each other.



SNMP based NMS software



NMS monitors your network 24/7 to timely alert you to issues before they become emergencies. Allow you to achieve instant awareness of IT infrastructure problems, so downtime doesn't adversely affect your business. Usual NMS software offers complete monitoring and alerting for servers, switches, applications, and services. By integrating Lande's environmental monitoring systems and PDUs, you achieve a complete control over your IT infrastructure in one place.

All Lande's master systems support SNMP v.1, v.2c, v.3. Required MIB files are included with all systems. Some of the supported NMS systems are listed below, for a full list please visit our website.

HP Network Node Manager	ServersCheck
IBM Tivoli	Zabbix
PRTG Network Monitor	Nagios
Open NMS	Cacti
Monitorix	and many more

Infrastructure monitoring program (Nagios)

We have preconfigured Nagios to automatically work with any of our products. You can download and install Lande plugin directly into Nagios or download a disk image that includes VirtualBox, CentOS 6.5, Nagios 3.5.1 and Lande plugin preinstalled into Nagios.

Scalability



Following sensors and devices can be connected to Monitoring system LN-VT325:

Embedded modules	Description
LN-VT10 / 1-Wire board	Allows to communicate with 1-Wire readers or sensors.

Analog sensors	Description
LN-VT420 / Converter 4-20mA	Converter of current loop 4-20mA is used for measurement of constant current on 4-20mA from different sensors and converting data into format of IP monitoring system. The system interface allows you to assign the sensor and to introduce the function data conversion.
LN-VT500 / Temperature sensor	For measurement of temperature indoors.
LN-VT501 / Outdoor temperature sensor	For measurement of temperature outdoors.
LN-VT510 / Humidity sensor	Measures relative humidity 10-95% indoors with relative accuracy 5%.
LN-VT520 / AC voltage monitor	Measures AC 110-240V
LN-VT530 / Access sensor	Sensor controls the status of a door or a window: opened, closed.
LN-VT540 / Vibration sensor	Detects vibration, allows daisy chain connection
LN-VT560 / Smoke detector	Detector detects smoke indoors, allows daisy chain connection
LN-VT570 / PIR sensor	Infrared motion sensor
LN-VT590 / Leak sensor	When water is in contact with the metal cores, the sensor indicates the emergence of moisture.
LN-VT591 / Water leak cable sensor	When water is in contact with detection cable, sensor indicates the emergence of moisture.

1-Wire sensors	Description
LN-VT581 / Temperature sensor	For measurement of temperature indoors.
LN-VT583 / Outdoor temperature sensor	For measurement of temperature outdoors.
LN-VT585/ Converter of thermocouples	For measurement of criogenic temperatures.

AC / DC meters	Description
Current trnsducers, DC & AC voltage monitors	Please look for description at www.Lande.com.tr

Accessories	Description
LN-VT112 / Rotary brackets	Allow to mount LN-VT325 on the walls, inside a rack and etc.

Please refer to www.Lande.com.tr for a complete list of Lande proucts. Products may change over time.

Security, Notifications and Alarms

LN-VT325 authorization is going through the Radius protocols, that highly increases resistance to forced attacks.

Notifications and alarms can be configured in "Logic menu" of web-interface using the states of sensors, timers, triggers and so on. In case of a problems the notification scheme can alert user via email, SMS or SNMP, automatically send pictures and data.

The complete status of the unit and / or sensors can be taken through HTTP, SMS, or SNMP, saved on FTP and Syslog servers or on installed SD card.

Support and Warranty

- Full One Year Global Warranty
- Unlimited Lifetime Support.
- Free Firmware Updates.
- Full, Easy to Follow Documentation.

LN-VT325 Features List

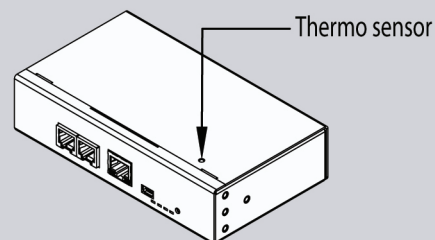
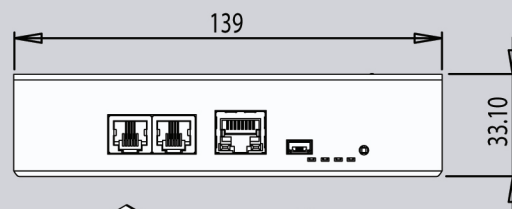
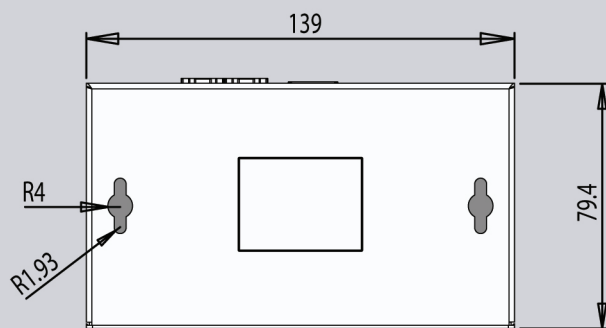
- Receive notifications of anomalous events via email, SNMP traps, SMS / MMS (USB modem not included).
- Integrates with network management systems via SNMP v.1 and Encrypted SNMP v.3.
- Uses Linux operating system for maximum stability and flexibility.
- Web GUI for PC, smartphones and tablets; free firmware upgrades and utilities.
- Compatible with full range of different third-party sensors
- Embedded web server displays sensor information and live video from connected cameras.

Specifications

Dimensions Size 140 x 34 x 80 mm Desktop Weight 0,5 Kg	Inputs 2 RJ-12 ports 2 dry contact inputs	Operating Environment Temperature: Min. -35° C, Max.80° C Humidity : Min. 5%, Max. 80% (Non-Condensing)
Power Requirements DC12V, 1A	Network Interface Ethernet 10/100 Mbit/s	Expansion Devices LN-VT10 / 1-Wire Board (ordered separately)
Mounting Desktop Wall mounting using LN-VT112 (ordered separately)	Status Indicators LED indication for Power / Network connectivity LED indication for two relays (E1, E2) Error Led	Other HS USB (for USB Camera or USB modem or USB Flash) External earthing
Power Consumption 3-10 Watt, 0.12 A	Outputs 2 * 12V 0.25A outputs	Components Manufactured in E.U.
Status indicators LEDs: Power, Relays and Error		

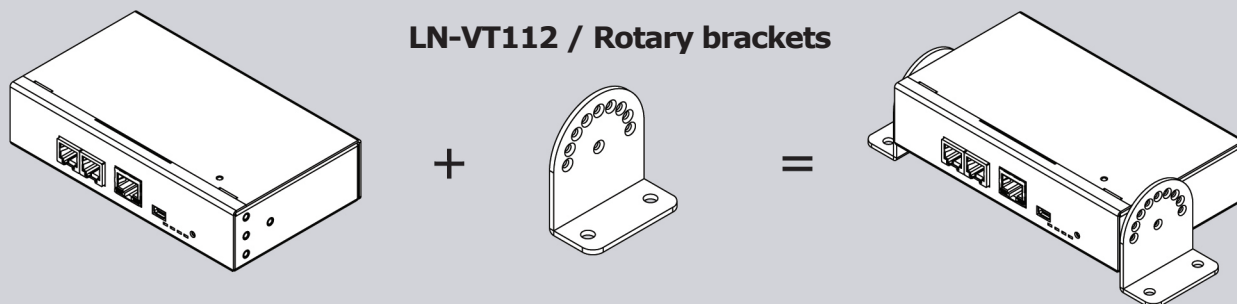
Mounting, Dimensions & Order options

Dimensions

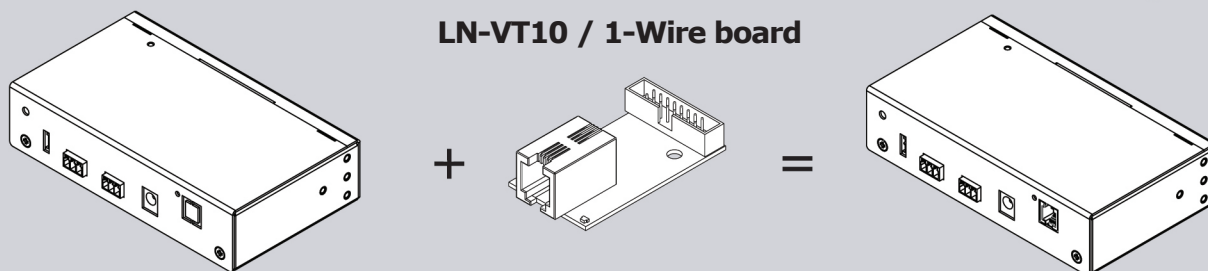


Order options (ordered separately)

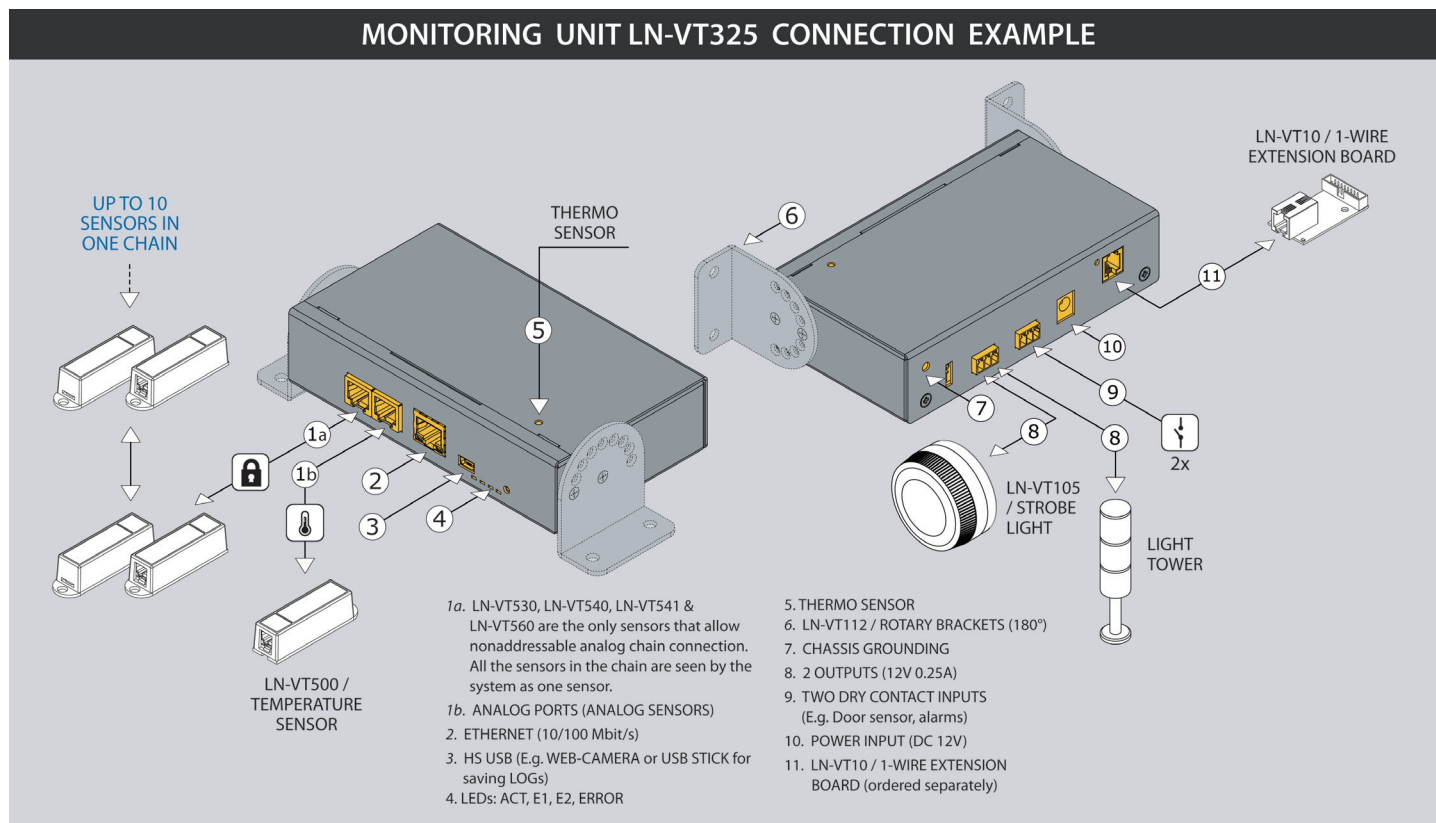
LN-VT112 / Rotary brackets



LN-VT10 / 1-Wire board



Connection example



Basic package includes

- Monitoring unit
- Power adapter 12V, 1A
- RJ-45 1m patch cable
- Terminal plug 3,5 mm / 3P
- Terminal plug 3,81 mm / 3P
- USB-MiniUSB cable
- Self-adhesive rubber foot - 4 pcs
- Installation manual
- Warranty card

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