![Zertico logo] Zertico®
INFRASTRUCTURE MONITORING

Zertico Combined Motion, Vibration and Temperature Sensor

Application possibilities of Zertico Monitoring devices:
- Monitoring of IT infrastructure (e.g. data center)
- Monitoring of technical rooms in branch offices
- Remote monitoring of power systems
- Monitoring of telecommunication infrastructure
- Remote Tower monitoring
- 7/24 monitoring of aircon / HVAC systems
- Monitoring of UPS and generators
- Monitoring of enclosures / server cabinets / rack monitoring
- Remote Monitoring of production & logistics infrastructure
- Temperature monitoring of cold rooms / cold storage
- Remote monitoring of building systems
- Monitoring of warehouse, depot and archive
- and many more ......

Features of Zertico Monitoring System 500:
- Made in E.U.
- 1U, 19" rack mount kit included
- Stand-alone operation, no additional software required
- DHCP-, HTTP(S), SNMP-, SMTP-, SSL-, CAN-, FTP-, Syslog
- SNMP v1/v2c/v3 compatible for integration in SNMP tools & NMS (e.g. Nagios, OpenNMS)
- 10/100 Mbit Ethernet Port, 64 MB RAM, 128 MB ROM,
- SD-Slot for optional SD Card (up to 64 GB)
- 8x Automatic Identification Sensor Ports
- 2x CAN-Bus Ports for CAN-Sensors & -Units (Control Area Network)
- 4 integrated relays (manual / sensor controlled switching)
- 2x USB ports for optional video monitoring
- 16 Dry Contact Ports (optional feature)
- Future-ready with optional CAN-Units
- Extensive portfolio of Zertico Sensors
- Status indicators on the front panel (LED)
- Multilingual Web GUI with integrated logic
- Alerts such as SNMP, e-mail, SMS * (* GSM modem required)
- SMS command functions, including acknowledgement*
- Seperate logins for Users and Admins, LDAP Support
- SNMP-Traps to NMS (e.g. Nagios, OpenNMS)
- SNMP MIB Files included, free Nagios plugin
- Integrated graphing functions
- XML- & CSV- export of measured sensor data
- Integrated mapping function
- Integrated logic schemes, time and date filters
- Free firmware updates (via Internet)
- and many more.....

Important infrastructure should be protected by the installation of suitable sensors.
Zertico provides for the monitoring of business critical infrastructures, such as wiring closets and server rooms, this Combined Motion, Vibration and Temperature Sensor.

Typical applications:
- Detection of motion or presence in sensitive infrastructure
- Reliable detection of access in wiring closets and server rooms
- SNMP based remote measurement and monitoring of temperature
- Access control and intrusion detection in remote telecom sites

Fig.: How will you be alerted when uninvited guests enter your mission-critical infrastructure?
Rely on Zertico`s proven remote security solutions!

Easy installation
This combined temperature, motion and vibration detection sensor is simply connected via RJ12 patch cable with one of the two CAN ports of Zertico remote monitoring device.
An additional power supply for this combined sensor is not needed because it is powered by Zertico remote monitoring unit.
A 2 meter patch cable is already included. Optionally, you can issue this combined sensor up to 200 meters from the Zertico SNMP-enabled remote monitoring system. If you need more of these combined temperature, motion and vibration detectors, you can easily connect these Zertico CAN-Sensors in series.

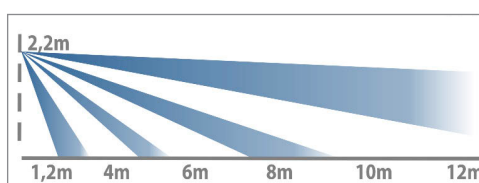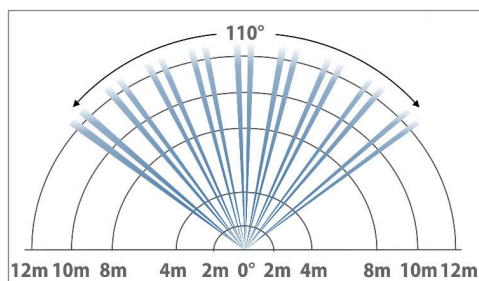## Reliable alerts and notifications
In multilingual web interface of Zertico remote monitoring and alarm system, you can individually configure each sensor and set the desired notification and alarm types.
Get informed in case of unauthorized access immediately by e-mail, SMS (via GSM modem) or SNMP trap to your building monitoring or network management software (Nagios, OpenNMS and many more).
Protect your unmanned technology infrastructure in remote locations.
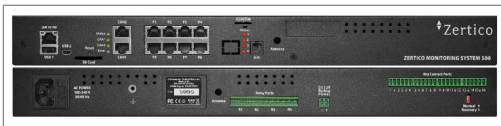
Technical specifications:

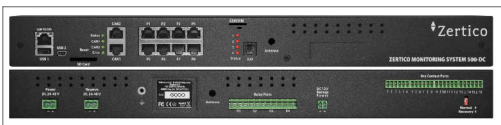| Useable for:	all Zertico Remote Monitoring devices
PIR detection angle:	110°
Max. detection distance:	12m
Maximum distance:	200m
Measured range of temperature:	-20° up to 60°C / -4°F up to 140°F
Autodetection function:	This sensor is detected automatically by all Zertico appliances
Net weight:	130g
Dimensions:	105×57×40mm
Power:	powered by Zertico Appliance, no power supply needed

Item number:
14031   **Zertico Combined Motion, Vibration and Temperature Sensor,** suitable for all Zertico remote infrastructure monitoring appliances and PDU`s.

Overview Zertico Monitoring Systems

Zertico Monitoring System 500 (item No. 14000)

With Zertico Monitoring System 500 you get a high-end monitoring solution to protect sensitive infrastructure. This device is suitable for monitoring of IT infrastructure, as well as for production and technical rooms. With it`s full SNMP support this Zertico monitoring system can be included in management solutions and network monitoring software. The Zertico Monitoring System 500 provides 8 ports for analog sensors. 2 CAN-bus ports support you in the future expansion of your (IT) infrastructure monitoring. Additional 4 relay ports enable IP-based control important equipment such as fans. The Zertico Monitoring System 500 can be equipped with a 16 port dry contact board and a Quad-Band GSM modem.

Zertico Monitoring System 500 DC (item No. 14004)

This IT Monitoring appliances was specially developed for the monitoring of energy and tele-communications infrastructure and is equipped with an internal 24-48V DC power supply. With 2x CAN bus ports and 8 analog sensor ports, this monitoring device can monitor your critical equipment over network or the Web. 4 integrated relays can be switched on and off manually, via SNMP command or in combination with the connected sensors. With optional 16-port dry contact board you can monitor critical UPS or HVAC systems around the clock. The Zertico Monitoring System 600 is fully SNMPv1/v2c/v3 compatibel and can in integrated in almost all SNMP-enabled monitoring tools and network management systems.

Zertico Monitoring System 600 (item No. 14001)

This high-end monitoring appliance is currently the top product of Zertico`s SNMP enabled monitoring systems. In addition to 2x CAN bus ports, 8 analog sensor ports and 4x C13 relay connections are offered. The full SNMPv1/v2c/v3 support allows integration with SNMP-based building and network management solutions. Optionally, dry contacts of installations of the building and security technology can be integrated into the 7/24 surveillance of this device.
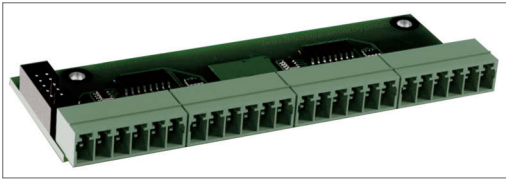
Zertico 8-Port PDU (item No. 14038)

This power distribution unit supplies up to 8 devices in the cabinet. With remote access, you can manage the power of mission-critical devices. At the same time, you can attach CAN bus sensors and CAN bus extension units to the Zertico PDU to intensify your infrastructure moni-toring. Per optional GSM modem, you can even send remote SMS commands to this PDU.

Integration of Zertico Monitoring Systems in Network Management Systems

Customers use the SNMP-enabled Zertico monitoring devices under the following software (excerpt):
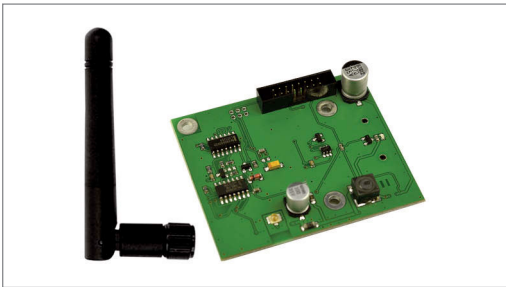
- AccelOps	- HP Network Node Manager	- Nagios	- Shinken
- AdRem NetCrunch	- IBM Tivoli	- NetXMS	- Solarwinds
- AggreGate Network Manager	- Icinga	- NeutralStar	- Spiceworks
- CA Spectrum	- InterMapper	- Observium	- TclMon
- Cacti	- IPHost Network Monitor	- OpenNMS	- Verax NMS
- Centina Systems NetOmnia	- Kaseya Network Monitor	- OpManager	- WhatsUp Gold
- Collectd	- LiveAction QoS Monitor	- Opmantek NMIS	- Xymon Monitor
- Dhyan Network Management System	- Monitorix	- OSI NetExpert	- Zabbix
- Ganglia Monitoring System	- MRTG	- PRTG	- Zenoss
- GroundWork	- Munin	- SevOne	

Options for Zertico Monitoring Systems:

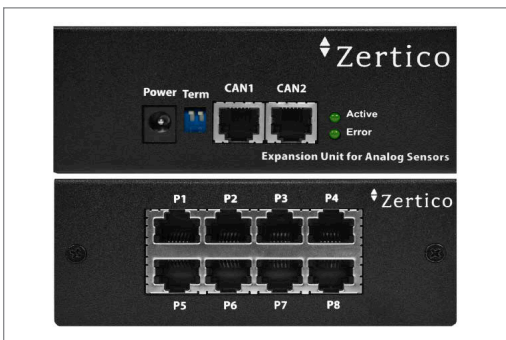### Zertico 16 Port Dry Contact board (Art.Nr. 14027)
Your Zertico Monitoring System can monitor dry contacts over TCP/IP or web with optional 16 Port Dry Contact board. Here you can attach dry contacts of your UPS, HVAC or security systems. In Web GUI of Zertico Monitoring System you can configure the dry contacts (normally open (NO) or Normally closed (NC)). Zertico`s monitoring devices can send you E-Mail, SMS (GSM modem required) or SNMP traps to automation systems or Network Management Software.

Zertico GSM Modem (item No. 14025)
All Zertico Monitoring Systems can be equipped with an optional quad-band GSM modem to send notifications and alarms via SMS. In case of total loss of network connection, you can even control the Zertico remote security devices via SMS command function. Each command is acknowledged by the Zertico monitoring system via SMS. On request, a weatherproof outdoor antenna can also be mounted to Zertico GSM modem.
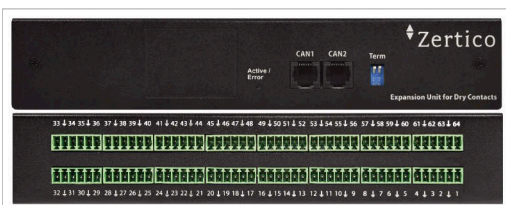
CAN-Bus Extension Units:

Zertico Expansion Unit for Analog Sensors (item No. 14029)
This CAN expansion unit is connected to one of the two CAN bus ports on your SNMP compatible Zertico remote monitor device. At each of these units, up to 8 different Zertico analog sensors can be connected.
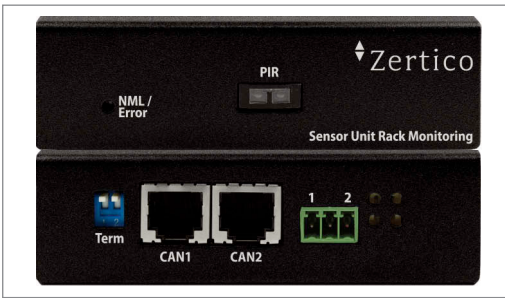By automatic identification feature, each connected sensor is immediately recognized by the Zertico monitoring appliance. In the Web GUI, you can define limits and warning thresholds for each sensor. Then just set the desired alert or notification for each sensor. The maximum distance between the CAN extension unit and the Zertico Monitoring System can be up to 300 meters. Individual CAN sensors and CAN expansion units can be connected in series.

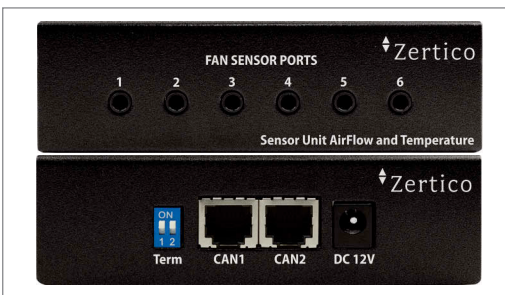### Zertico Dry Contact Module (item No. 14028)
Monitor with this CAN module, up to 64 dry contacts of critical equipment and systems.
You can configure the Dry Contact Module in the Web GUI.

Combined CAN-Bus Sensor Units

Zertico Combined Sensor Unit for Rack Monitoring (item No. 14030)

This Zertico sensor unit has been specially designed for monitoring of server cabinets.
In this sensor unit, a passive infrared sensor, a humidity sensor and two dry contact are integrated. This sensor unit is connected via CAN bus with your SNMP-enabled Zertico measuring and remote monitoring device. In it`s Web GUI, you can then specify the desired actions and notifications. By use of patch cable, the total length between sensor unit and Zertico main device can be up to 300 meters.

Zertico Combined Sensor Unit AirFlow & Temperature (item No. 14034)

This combined sensor unit has been specially designed for the measurement and monitoring of ventilation and air-cooling systems. Monitor the presence of the Air Flow and control it`s temperature. The sensor unit has 6 ports for the combined Zertico AirFlow & Temperature sensors. 2 of these combined sensors are already included in the package.
This CAN-Bus unit connected via patch cable to one of two CAN bus ports of your Zertico infrastructure monitoring appliance and configured via it`s multi-language web interface.

Zertico Combined Sensor Unit Temperature & Humidity, (item No. 14044)

This sensor is specifically designed for the measurement of the two important environmental parameters temperature and relative humidity (RH). This combined sensor belongs to the group of Zertico`s CAN based sensors (Control Area Network). This dual temperature and humidity sensor is compatible to all Zertico remote monitoring systems and PDU `s.

Zertico Combined Sensor Unit Temperature, Motion and Vibration (item No. 14031)

This CAN bus sensor unit combines a temperature sensor, a passive infrared sensor (PIR) and a vibration detector in a single case. Monitor with this combined sensor your mission-critical infrastructure. If temperature variations, motion or vibration is detected, you will be notified by E-mail, SMS (GSM modem requried) or by SNMP traps to your building or network monitoring solution.

Zertico Combined Sensor Unit: Smoke Detector, Temperature & Humidity (item No. 14035)

This Zertico CAN sensor unit integrates a smoke detector, temperature and humidity (RH) sensor. Monitor with this combined CAN-sensor unit important infrastructure such as technical room, server room, production and storage areas. Up to 8 of these units can be connected in one chain and occupy only one CAN bus port on your Zertico Infrastructure Monitoring System.
In web interface, you can set for the temperature and humidity individual thresholds and warning values. All Zertico remote monitoring devices can send E-Mail, SMS (GSM modem required) and SNMP notifications.

Analog Sensors for Environmental Monitoring

Zertico Temperature Sensor (item No. 14010)

The SNMP-enabled Zertico temperature sensor is specifically designed for the precise measurement of the temperature.
This sensor is compatible with Zertico`s complete range of SNMP-enabled Monitoring Systems.
Via automatic identification feature, the sensor is automatically detected by IP-based Zertico monitoring device.
This sensor can be placed on request up to 100m away from the Zertico monitoring appliance via patch cable.

Zertico Outdoor Temperature Sensor (item No. 14011)

The SNMP-enabled Zertico Outdoor Temperature sensor has been developed for the measurement of temperature in damp / wet (production) environments as well as for outdoor area. The length of the connecting cable is 15 meters. If desired, this weather-resistant sensor can be located up to 100m away from the Zertico monitoring appliance. This sensor is automatically detected by the Zertico monitoring system.

Zertico Humidity Sensor (item No. 14012)

This precise sensor used to measure the important environmental factor relative humidity. The sensor can be located up to 50m away via patch cable from SNMPv1/v2c/v3 compliant Zertico measuring and monitoring system.
Per automatic identification function, this humidity sensor is automatically detected and displayed in the Web interface of your Zertico Monitoring System. You can then define limits and warning levels for humidity. Your Zertico Monitoring System will send you alerts via E-mail, SMS (requires GSM modem) or SNMP traps. The measured humidity data can easily be exported as XML- or CSV- file.
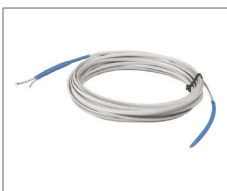
Zertico Water Leakage Sensor (Item No. 14018)

The SNMP-enabled Zertico water sensor detects water and water-based liquids. In case of water leaks and the presence of condensation you will be reliable alerted by the Zertico Infrastructure Monitoring System. The water sensor can be extended up to 100 meters away of your Zertico main unit to enable flexible installation.

Zertico Sensor unit for Water Detection Cable (Item No. 14020)

This SNMP-enabled sensor unit is specially designed for the water Zertico Water Detection Cable. Connect to this sensor unit Zertico`s Water Leak Detection with individual length of up to 50 meters. The sensor unit itself can be extended with RJ12 patch cable up to 100 meters away from the Zertico Infrastructure Monitoring device. Per auto detection feature, the sensor is detected automatically and can be easily configured in the Web GUI of Zertico units. In case of leakage, you will be notified by Zertico`s early warning system.

Zertico Water Detection Cable (item No. 14021)

This Water Detection Cable is specifically designed for the reliable detection of leakage and water.
The chain is simply mounted to the Zertico Sensor unit (item No. 14021). The Water Detection Cable is available in lengths from 1 to 50 meters. On the entire length of this cable, the discharge of water / condensation / moisture is detected.

Zertico Vibration Sensor (item No. 14014)

Protect your valuable infrastructure: This sensor is used to detect vibrations / glass breakage. This vibration sensor can monitor doors, windows, glass walls and walls made of plasterboard. This sensor can be connected in chain to protect larger areas. The Zertico monitoring appliance detects the sensor automatically by use of the automatic identification feature.

Analog Sensors for Environmental Monitoring

Zertico Smoke Detector (item No. 14017)

Install this smoke detector to be notified immediately in case of fire. On request, the Zertico smoke sensors can be connected in series. By use of RJ-12 patch cable, the smoke sensor can be located up to 150 meters from the Zertico main control unit. The Zertico monitoring system will detect the smoke sensor automatically by auto identification feature. In case of smoke or fire, you will be notified via E-Mail, SMS (GSM modem required), or via SNMP traps to your automation software or NMS.

Zertico Motion Detector (item No. 14019)

Protect your mission crtical infrastructure: This SNMP-enabled motion detector has been specifically designed for the detection of presence and movement. The integrated passive infrared sensor has a range of up to 12 meters at an angle of 110 °. This Motion Detector can be located up to 50 meters from the Zertico monitoring unit.
The monitoring appliance recognizes the sensor by auto detection feature. In the Web GUI of the Zertico Monitoring System, you can set the notifications such as E-Mail, SNMP traps or relay actions. Time and date filters for motion detection can also be easily configured.

Zertico Security Sensor (item No. 14015)

Protect your important server room and server cabinets against unauthorized access. The SNMP-enabled sensor security is a magnetic switch used for reliable monitoring of windows, doors, cabinets, etc. Once a door is opened, you will be notified by Zertico Monitoring System via E-mail , SMS (GSM modem required), or via SNMP traps.

Analog Sensors for Power Monitoring

Zertico DC Voltage Sensor (item No. 14023)

This sensor has been specifically designed for network-based monitoring of DC current from 0-10V. It is compatible to all Zertico remote monitoring systems. The DC voltage sensor is simply plugged into one sensor port of your Zertico monitoring system. You can configure the DC current sensor in web GUI. This sensor can be located up to 100 meters of the Zertico main unit. The DC current sensor is also available for monitoring of 0 to 14.8 V DC voltage (item No. 14024).

Zertico AC Voltage Sensor (item No. 14016)

Zertico`s AC Voltage Sensor is suitable for TCP / IP-based monitoring of AC current. The sensor is simply connected to an analog port of the sensor Zertico monitoring device and automatically displayed in it`s web GUI. You will be informed immediately, for example, during a power failure or when your UPS is running.

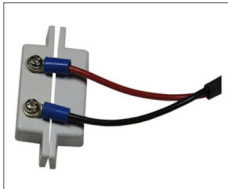### Zertico 4-20 mAmp Signal Converter Sensor (item No. 14022)

This 4-20 mAmp signal converter sensor is specially designed for the full SNMP-compliant Zertico Monitoring Systems. Existing analog sensors such as pressure sensors can be integrated with signal converter sensor in the network-based monitoring of Zertico devices. The measuring converter sensor is automatically detected by Zertico main unit.
In it`s web interface, you can configure the signal converter individually. Set thresholds and select notifications such as E-Mail or SNMP traps. All measured data is stored in integrated data logger of Zertico Monitoring System and can be easily exported as a CSV- or XML- file.

Zertico Sensors for Dry Contact installation

Zertico Airflow Sensor (item No. 14033)

Server cabinets need non-stop air circulation to cool important servers and network equipment. Zertico`s Airflow sensor is connected via a 2-wire signal cable to the dry contact module (optional) of the Zertico Monitoring System.
If the fan of your power supply or cooling unit fails, you will be alerted immediately by Zertico`s Remote Monitoring System.

Zertico Security Sensor for Dry Contacts (item No. 14032)

Protect important infrastructure such as technical room or server room from unauthorized access. This sensor is magnetic contact it`s simply connected via two-wire cable with the optional Dry Contact Module of your Zertico monitoring appliance. In the web GUI you can define the normal state of the magnetic switch (normaly open / normaly closed).
Get notified via E-mail, SMS (GSM modem required) or via SNMP trap when your mission critical infrastructure is entered or Server cabinet is opened.

Zertico Smoke Detector with Relay Output (item No. 14043)

The smoke detector operates autonomously and is powered by a 9V lithium battery. With support of it`s integrated testing function of the measuring chamber, a high level of operational safety of this smoke detector is supported.
Zertico`s smoke detection sensor also detects possible pollution and reports this via the integrated fault indication LED.
 If smoke enters the detector, it produces a loud warning signal with more than 85 dba.
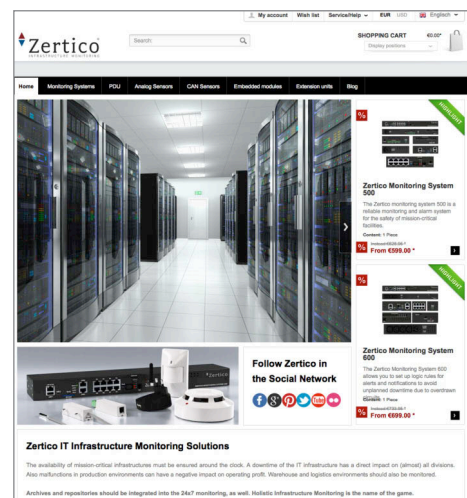

Zertico Gas Sensor / gas detector (item No. 14040)

Uncontrolled escape of gases such as butane, propane, methane must be reliably detected. Gas heating systems should be also equipped with a gas detector. Zertico`s gas detector has been specifically designed for the detection of gases.
This gas sensor is attached to dry contacts of the SNMP enabled Zertico Monitoring Systems (Dry Contact Board needed)..
Optionally this gas detector can be attached to Zertico`s Dry Contact Expansion unit.

Fig.: Protect you infrastructure against unwanted threats such as temperature, water leakage or power failure.

Fig.: In the Zertico online store you can order the Zertico monitoring systems and sensors.

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