

#### Didactum's IP-based monitoring devices have many uses:

- Monitoring of wiring closets and server room environments
- Remote monitoring of technical rooms in branch offices
- Monitoring of power supply systems
- Monitoring of telecommunication infrastructure
- 24/7 monitoring of air conditioning / HVAC systems
- Remote Monitoring of UPS and standby power systems
- Monitoring of server cabinets / rack monitoring
- Monitoring of production areas
- Temperature monitoring of cold rooms / cold storage
- Monitoring of building systems
- Remote monitoring of warehouse, depot and archive
- and many more....

#### Features of Didactum Monitoring System 500:

- Made in E.U.
- 19" rack mount kit for cabinet assembly included
- Stand-alone operation, no software installation required
- DHCP, HTTP(S), SNMP, SMTP, SSL, FTP, Syslog, Radius
  SNMP v1/v2c/v3 compatible for integration in SNMP-Tools and Network Management Systems (eg Nagios)
- 10/100 Mbit Ethernet Port, 64 MB RAM, 128 MB ROM,
- 8x Autoidentification ports for Didactum analog sensors
- 2x CAN bus ports for CAN sensors and CAN units
- 2x USB ports for optional 4G LTE modem or USB video cameras
- 4x integrated relays (manual / SNMP / sensor controlled )
- 1x SD-Card slot for optional upgrade of data logger
- Extensive portfolio of Didactum analog sensors
- Status indicators on the front panel (LED)
- multilingual Web GUI with integrated logic
- · Alarms such as SNMP, e-mail, SMS (GSM modem required)
- Separate logins for user and Admin, LDAP Support
- SNMP-Traps to NMS and SNMP-Tools
- MIB Files and Nagios Plugins included
- Integrated graphing functions
- XML- & CSV- files for export of measured sensor data
- Integrated mapping function
- Integrated time and date filters, trigger functions
- Free firmware updates (web)
- and many more....



**Fig.:** Didactum's SNMP enabled remote monitoring devices provide additional connections for analog sensors. Via autodetection function, the connected sensor is detected immediately!



**Fig.:** Each sensor can be configured in the web interface of the Didactum monitoring system individually. Specify the individual limit and warning values of each sensor! Get reliably informed by e-mail or SNMP traps.

## Temperature Sensor

#### Network enabled temperature monitoring of sensitive infrastructures

Measure and monitor this important environmental factor in your temperature sensitive infrastructure. Make sure that a sudden temperature does not affect your mission critical infrastructure. A permanent temperature recording is important in the context of compliance. It is also suitable for audits.

#### Typical applications of Didactum's temperature sensor:

- Temperature monitoring of mission-crtitical infrastructure
- · Long-term measurement of the temperature in warehouses, depots and archives
- Temperature monitoring of enclosures and server cabinets



Fig.: Protect your sensitive (IT) infrastructure against critical environmental factors such as heat, fire or humidity. Rely on the proven 7/24 remote monitoring solutions from manufacturer Didactum.

#### Easy installation of temp sensor

The temperature sensor is easily connected via RJ11 patch cable to the Didactum remote monitoring system and automatically displayed on it's multilingual WebGUI.

As part of the temperature monitoring, you can easily query this sensor via Network or Internet. The temp sensor can be located up to 100 meters from the Didactum monitoring devices by using your own RJ-11 cable.

#### Technical specifications of Didactum's temp sensor:

Useable for:	all Didactum Rack Monitoring Systems
Measurement range temperature:	-40° up to +100°C / -40°F up to 212°F
Accuracy temperature sensor:	±1°C/1.8°F
Maximum distance:	this sensor can be extended by RJ11 cable up to 100 meters
Autosense function:	This sensor is automatically detected by all Didactum base units
Net weight:	60 g
Dimensions:	60×18×18mm (LHW)
Power:	powered by Didactum base unit, no additional power needed

#### Item number:

14010 Temperature sensor, 2m RJ11 patch cable, screws and mounting tape included. Made in EU. Suitable for all SNMP enabled Didactum monitoring devices and PDU's.

## **Overview Didactum Monitoring Systems**



#### Didactum Monitoring System 100 (item No. 14005)

The innovative Didactum Monitoring System 100 is the entry-level system of Didactum's highend remote monitoring systems. In addition to multilingual WebGUI, 4 ports for any Didactum analog sensors are offered. A factory-calibrated temperature sensor is included in delivery. This SNMPv1/v2c/3 enabled remote monitoring system can send notifications and alerts via email, SMS (via 4G LTE USB-modem) and SNMP Traps.



#### Didactum Monitoring System 400 (item No.14003)

The powerful Didactum Monitoring System 400 provides 8 ports for any Didactum analog sensors. In addition, 2 CAN bus connectors are offered for sensor expansion units and CAN sensors. Optionally, up to 16 dry contacts can be connected. The SNMPv1, SNMPv2c and SNMPv3 support allows integration of this remote monitoring system in leading NMS (Nagios, OpenNMS etc.).



#### Didactum Monitoring System 500 (item No. 14000)

With Didactum Monitoring System 500 you get a high-end monitoring solution to protect your sensitive infrastructure. This device is suitable for the monitoring of critical IT infrastructures, as well as production environments and technical facilities. With its full SNMP support this Didactum monitoring system can be included in management solutions and other third party network monitoring software. The Didactum Monitoring System 500 provides 8 ports for analog sensors. 2 CAN-bus ports provide flexibility and support for the future expansion of your (IT) infrastructure monitoring requirements. Additional 4 relay ports allow for IP-based automated control of important AC powered equipment such as fans. The Didactum Monitoring System 500 can be equipped with a 16 port dry contact board and a Quad-Band GSM modem.



#### Didactum Monitoring System 500 DC (item No. 14004)

This IT monitoring appliances is specifically designed for monitoring energy and telecommunications infrastructures 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 the network or the web. 4 integrated relays can be switched on and off manually via SNMP commands, or in combination with the connected sensors. With the optional 16-port dry contact board you can monitor your critical UPS or HVAC systems around the clock. The Didactum Monitoring System 500-DC is fully SNMPv1/v2c/v3 compliant and can be integrated in almost all SNMP-enabled monitoring tools and network management systems (NMS).



#### Didactum Monitoring System 600 (item No. 14001)

This high-end monitoring appliance is currently the top product of Didactum's network enabled monitoring systems. In addition to 2x CAN bus ports, 8 analog sensor ports and 4x C13 relay connections are offered. The full support of SNMPv1/v2c/v3 allows the seamless integration into other third party SNMP-based building and network management solutions. As an additional option dry contacts from installations of other building and security technologies

As an additional option dry contacts from installations of other building and security technologies can be easily integrated into the 7/24 surveillance features of this remote monitoring device.



#### Didactum 8-Port PDU (item No. 14038)

This network-enabled power distribution unit supplies AC voltage for up to 8 devices in your cabinet. With remote access you can manage the power of mission-critical devices. At the same time you can attach CAN sensors and CAN expansion units to the Didactum PDU. This allows you to drastically enhance the control your infrastructure and reduce your costs of monitoring. Using the optional GSM modem, you can even send remote SMS commands to this PDU.

### **Options for Didactum Monitoring Systems:**



#### Didactum 16 Port Dry Contact board (item No. 14027)

Didactum's Monitoring System 400/500/500-DC/600 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 Didactum Monitoring System you can configure the dry contacts (normally open (NO) or Normally closed (NC)). Didactum's monitoring devices can send you E-Mail, SMS (GSM modem required) or SNMP traps to automation systems or NMS (eg Nagios).



#### Quad band GSM Modem (item No. 14025)

Didactum's Monitoring Systems 400/500/500-DC/600 can be equipped with an optional quadband GSM modem to send notifications and alarms via SMS. In case of total loss of network connection, you can even control the Didactum remote security devices via SMS command function. Each command is acknowledged by the Didactum monitoring system via SMS. On request, a weatherproof outdoor antenna can also be mounted this Didactum GSM modem.



#### 4G LTE USB Modem (item No. 14098)

All Didactum Monitoring Systems can be equipped with this compact LTE category 4 USB modem to send alerts via SMS. This USB modem supports the proctols GSM, GPRS, EDGE, UMTS, HSDPA, HSUPA, LTE and DCHSPA+.



#### Li-lon battery for backup power (item No. 14007)

Didactum's SNMP-enabled remote monitoring systems 500, 500-DC and 600 can be equipped with this Li-Ion battery. In case of power failure or insufficient capacity of the UPS system, your Didactum remote monitoring system is supplied with backup battery voltage.

### **Didactum CAN-Bus Extension units:**



#### Didactum Expansion Unit for Analog Sensors (item No. 14029)

This CAN expansion unit is connected to one of the two CAN-bus ports on the SNMP compatible Didactum remote monitoring devices 400/500/500-DC/600. At each of these units, up to 8 different SNMP-enabled, analog Didactum sensors can be connected. By autoidentification feature, each connected sensor is immediately recognized by the Didactum 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 Didactum Monitoring System can be up to 305 meters. Individual CAN sensors and CAN units can be easily connected in series.

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			Expansion Unit for Dry Contacts
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#### Didactum Dry Contact CAN unit (item No. 14028)

Monitor with this CAN unit, up to 64 dry contacts of critical equipment and systems. This CAN-Bus dry contact unit is supported by Didactum Monitoring Systems 400/500/500-DC/600. You can easily configure the Dry Contact unit in the Web GUI.

## **Combined CAN-Bus Sensor Units**



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

This Didactum CAN-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 Didactum 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 Didactum main device can be up to 300 meters. Didactum Monitoring Systems 400/500/500-DC/600 are supported.



#### Didactum 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 Didactum AirFlow & Temperature sen- sors. 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 Didactum infrastructure monitoring appliance and conigured via it's multi-language web interface. Didactum Monitoring Systems 400/500/500-DC/600 are supported by this CAN-unit.



#### Didactum Combined Sensor Temperature & Humidity (item No. 14044)

This sensor is designed for the measurement of the two important environmental parameters temperature and relative humidity (RH). This combined sensor belongs to the group of Didactum's CAN based sensors (Control Area Network). This dual temperature and humidity sensor is compatible to Didactum remote monitoring systems 400/500/500-DC/600 and PDU 's. This temperature and humidity Sensor is factory calibrated according to ISO/IEC 17025.



**Didactum 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 required) or by SNMP traps to your building or network monitoring solution. Didactum Monitoring Systems 400/500/500-DC/600 are supported by this combined CAN-sensor unit.



Didactum Combined Sensor Unit: Smoke Detector, Temperature & Humidity (item No. 14035) This innovative Didactum 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 Didactum Infrastructure Monitoring System 400/500/500-DC/600. In web interface, you can set for the temperature and humidity individual thresholds and warning values. All Didactum remote monitoring devices can send E-Mail, SMS (GSM modem required) and SNMP notifications to NMS such as Nagios or OpenNMS and many more.

### **Analog Sensors for SNMP-enabled Environmental Monitoring**



#### Didactum Temperature Sensor (item No. 14010)

The SNMP-enabled Didactum temperature sensor is specically designed for the precise measurement of the temperature. This sensor is compatible with Didactum's complete range of SNMP-enabled Monitoring Systems. Via autoidentification function of the sensor is automatically detected by IP-based Didactum monitoring device.

This sensor can be placed on request up to 100 meters away from the Didactum remote monitoring appliance via patch cable.



#### Didactum Outdoor Temperature Sensor (item No. 14011)

The SNMP-enabled Didactum 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 100 meters away from the Didactum monitoring appliance. This sensor is automatically detected by all Didactum network-enabled remote monitoring systems.



#### Didactum Humidity Sensor (item No. 14012)

This precise sensor used to measure the important environmental factor relative humidity. The sensor can be located up to 50 meters away via patch cable from SNMPv1/v2c/v3 compliant Didactum measuring and monitoring system. Per autoidentification function, this humidity sensor is automatically detected and displayed in the Web interface of your Didactum Monitoring System. You can then define limits and warning levels for humidity. Your Didactum 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.



#### Didactum Water Leakage Sensor (Item No. 14018)

The SNMP-enabled Didactum 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 Didactum Infrastructure Monitoring System. The water sensor can be extended up to 100 meters away of your Didactum main unit to enable flexible installation.



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

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



#### Didactum Water Detection Cable (item No. 14021)

This Water Detection Cable is specically designed for the reliable detection of water leakage. This cable is simply mounted to the Didactum Sensor unit (item No. 14021). The Water Detection Cable is available in lengths from 6 to 50 meters. On the entire length of this cable, the discharge of water / condensation / moisture is detected.



#### Didactum 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 Didactum monitoring appliance detects the sensor automatically by use of the autoidentification feature.

### Analog Sensors for network enabled Environmental Monitoring



#### Didactum Smoke Detector (item No. 14017)

Install this smoke detector to be immediately alerted in case of fire. On request the Didactum smoke sensors can be connected in series. By using an patch cable the smoke sensor can be extended up to 150 meters from the Didactum main control unit. The Didactum Monitoring System will detect the smoke sensor automatically by the units built-in auto-identification feature. In case of smoke or fire you will be alerted via E-Mail, SMS (GSM modem required), or via SNMP traps to your third party gateway software or Network Management System (NMS).



#### Didactum Motion Detector (item No. 14019)

Protect your mission critical infrastructure from security breaches: This SNMP-enabled motion detector has been specifically designed for the detection of movement or the presence of irregular activity within your infrastructure. The integrated passive infrared sensor has a range of up to 12 meters at an angle of 110 °. This Motion Detector can be extended up to 50 meters away from the Didactum monitoring device. The monitoring appliance recognizes the sensor by the built in auto-identification feature. You can then easily setup the notifications such as E-Mail, SNMP traps or relay actions in the WebGUI of the Didactum monitoring unit. You can also setup the time and date filters to eliminate unwanted alerts during normal working hours.



#### Didactum 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 Didactum Monitoring System via E-mail, SMS (GSM modem required), or via SNMP traps.

#### **Analog Sensors for SNMP-enabled Power Monitoring**



#### Didactum DC Voltage Sensor (item No. 14023)

This DC sensor has been specifically designed for network-based monitoring of DC current from 0-60V. It is compatible to all Didactum remote monitoring systems. The DC voltage sensor is simply plugged into one sensor port of your network-enabled Didactum Monitoring System. You can configure the DC current sensor in web GUI. This sensor can be located up to 100 meters of the Didactum main unit.



#### Didactum AC Voltage Sensor (item No. 14016)

Didactum's AC Voltage Sensor is suitable for network-enabled remote monitoring of AC current. The SNMP-enabled sensor is simply connected to an analog port of the sensor Didactum 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.



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

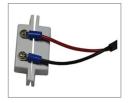
This 4-20 mAmp signal converter sensor is specially designed for the full SNMP-compliant Didactum Monitoring Systems. Existing analog sensors such as pressure sensors can be integrated with this signal converter sensor in the IP-based monitoring of Didactum devices. The measuring converter sensor is automatically detected by Didactum 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 Didactum Monitoring System and can be easily exported as a CSV- or XML- file.

### **Sensors for Dry Contact Installation**



#### Didactum Airflow Sensor (item No. 14033)

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



#### Didactum 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 and it's simply connected via two-wire cable with the optional dry contact module of your Didactum remote monitoring appliance. In the web GUI you can define the normal state of the magnetic switch (normally open / normally 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.



#### Didactum Gas Detector (item No. 14040)

Didactum's gas detector has been specifically designed for the detection of gases. Uncontrolled escape of gases such as butane, propane, methane can be detected by this gas sensor. This sensor is simply connected via two-wire cable with the optional dry contact inputs of your Didactum remote monitoring system.



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



**Fig.:** In the English-speaking online store you can order the Didactum monitoring systems and sensors. Just visit http://www.didactum-security.com/en

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