

WE SENSE DISASTER...  
AND NOW YOU ARE IN CONTROL...

# securityProbe-X20

SNMP-based Environmental and Security Monitoring Solution



Applications

## Monitoring Solutions for :

- Data Center & Server Rooms
- Telecommunication Room
- Network Equipment
- Remote ATM
- Backup Power & Generators
- Server Rack Monitoring
- Air Conditioning
- Cryogenics & Food industry
- Warehousing
- Medical & Pharmaceutical applications
- Building & Real estate Management

Does maintaining your infrastructure keep you on edge?  
Is your system designed to control the unpredictable?  
Simple, Cost Effective.

**securityProbe-X20** will monitor the physical environment and alert you of any disturbances, such as unauthorized intruders, security breaches, high temperatures, smoke, water leakages, power outages and much more.



Up to 4 remote controlled pan-and-tilt cameras, combined with the securityProbe-X20's motion detection and event notification system, can keep you up to date via email, SMS, telephone call, web-browser, and other channels - wherever you are, 24/7.

No software required. Ready to use right out of the box!

## Features

- Web Enabled - Embedded web server
- Email Notification
- SNMP trap notification
- full SNMP v1 Compliant
- NMS Integration
- 4 external camera ready
- Linux Operating System
- Video Conferencing Capability
- Built-in Graphing and Logging
- Platform Independent
- New faster CPU and Graphics card
- Built-in Pan tilt controller
- 20 Dry contact Inputs

Intelligent monitoring solutions for your Enterprise resources!!!

# securityProbe-X20

The securityProbe-X20 is the next generation dry contact device with an advanced 20 dry contact inputs. It comes in a 1U rackmount box. The securityProbe-X20 has a Linux Operating System with 128 Megabytes of Flash memory and 64 Megabytes of SDRAM. It is TCP/IP compliant and runs lighttpd web server including https (SSL), Bash, Perl, vi, Telnet, PHP, Email and Nagios. The securityProbe-X20 has an easy-to-use web-based user interface for sensor configuration, data collection and extensive graphing. Complete SNMP functions such as SNMP v3 encryption are supported. The web-based interface is written in PHP allowing end-user changes such as language translation. The securityProbe-X20 has a battery backed time of day clock for accurate record keeping.



## Features

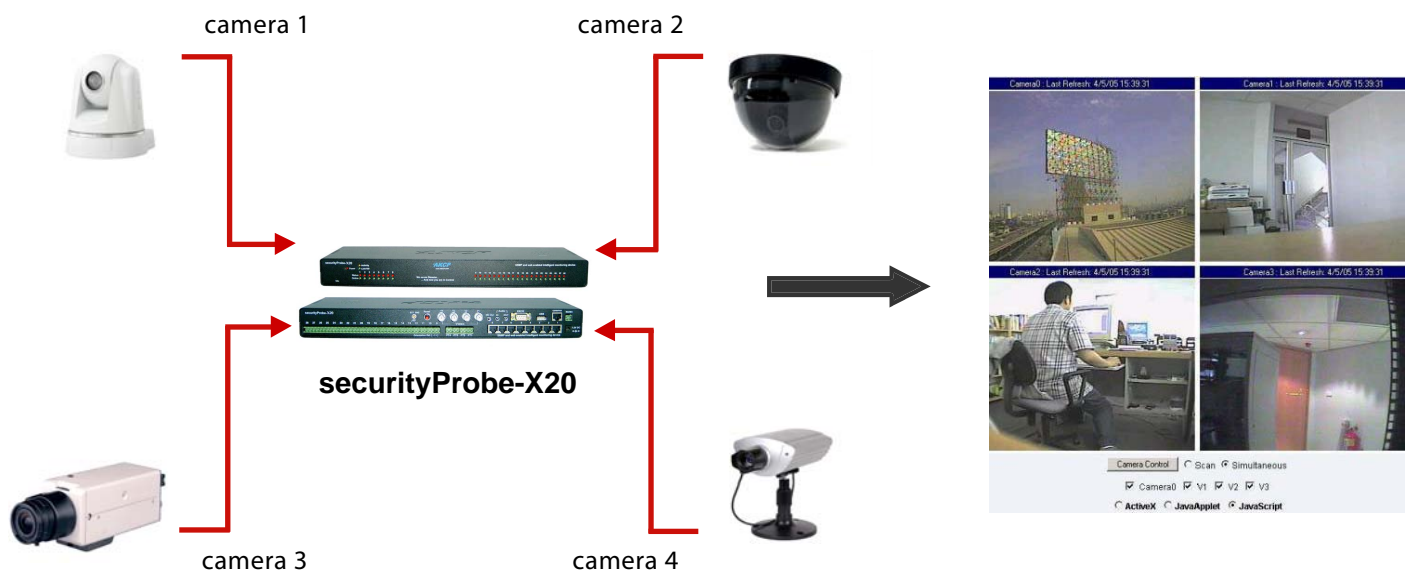
- Embedded web server displays sensor information and live video from connected cameras.
- Control PT cameras directly from the web interface.
- Record streaming video directly to remote servers or internal memory, or send live images to your own website.
- Connect up to 4 external cameras, and simultaneously display images up to 640x480 pixels resolution.
- Monitor up to 8 AKCP intelligent sensors, such as temperature and humidity, voltage, smoke detection, airflow and others.
- Receive notifications of anomalous events via email, SMS / MMS, SNMP traps, and many more.
- Integrates with network management systems via SNMPv1 and encrypted SNMPv3.
- Stream video and sensor information directly to your cellphone or PDA.
- Ability to connect external GPRS/GSM modem, Bluetooth and WiFi USB adapters.
- Uses an embedded Linux operating system for maximum stability and flexibility.
- Video conferencing capability.
- Built-in graphing and data logging, internally or to a remote PC.
- Platform independent; free firmware upgrades and utilities from AKCP.

## Architecture

- 8 full autosense RJ-45 ports
- 32-bit Xscale PXA270, 312 mhz processor
- 64 Megabytes of SDRAM
- 128 Megabytes of nonvolatile flash memory
- 10/100 Mbps Ethernet and 1 serial port
- USB 1.1 port
- Embedded Linux Operating System
- 20 Dry contact Inputs



AKCP Intelligent Sensors



## Applications

### Connect up to 4 external analogue cameras

The securityProbe-X20 can display pictures from four cameras simultaneously in several sizes, up to 640x480 pixels resolution.

Analogue cameras are the kind used in professional surveillance and CCTV monitoring systems. Built-in pan-tilt controller interface allows complete control of pan and tilt cameras using the industry standard Pelco-D bus.

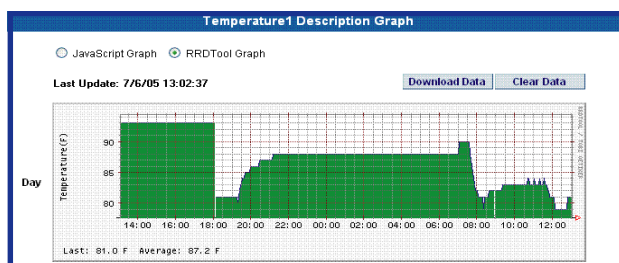
### Video Conferencing

Video conferencing is activated by connecting an external camera to the securityProbe-X20. The securityProbe-X20 has an integrated speaker and microphone for communication.



### Sensor Graphing

The securityProbe-X20 integrates and displays graphs of all sensor data in its web-based user interface. The individual graph (day, week, month and year) for each sensor type can be customized, simply by modifying the script template used to generate a particular graph. RRD tool is used to build an embedded database of sensor data. This data can be accessed from the web interface, or downloaded to a remote PC. MRTG can be used to generate real-time graphs of sensor data on a remote website



### False Message Filter

In order to prevent false alarms, the securityProbe-X20 allows extensive filtering of events. You can limit events based on the time of day or the day of the week. You can also limit the number of alerts per hour, so that you are not swamped with messages. This is especially important with the sensor like the motion detector where you may want to process an event only when the business premises are closed.

### Sensor Integration & Notification System

Up to 8 of AKCP's intelligent sensors can be plugged into the RJ-45 ports of the securityProbe-X20. Once inserted, the sensor automatically configures itself and goes online. Our easy-to-use web based interface allows you to setup the securityProbe-X20 within minutes. When online, the sensors use their 4 levels of threshold checking and report any status change.

Notifications and alarms can be dependent on the states of multiple sensors, and can be configured to escalate in severity over time.

The notification system can alert you of a problem via email, SMS messages and telephone calls, (additional hardware required), or send a message to any commercial network monitoring system using SNMP traps. The securityProbe-X20 can automatically switch a relay on or off, wake-up or shutdown a remote server, send pictures and data via FTP, send a FAX, run your custom script and many more versatile functions.

Email alerts can include a picture taken at the time of the event. All of the events are stored in the systems internal database; 23 pictures per event per camera can be recorded.

Event details include the time and the sensor which triggered the event along with the sensor readings. The database can be easily reviewed using our built-in web based analysis system. All of the pictures are time stamped. The securityProbe-X20's system log can be integrated with third party tools for storage and examination.



\*requires optional hardware

### Automatically shutdown your equipment in an emergency

AKCP's Linux devices will automatically send a shutdown message to your Linux or Windows based servers – so if there is a power outage, for example, you can rest assured that your servers will be safely and automatically shut down before your UPS runs out.

## Industry Certifications & Network Management Systems

AKCP offers NMS integration for leading network management systems such as:

AdRem NetCrunch  
 Quest Software – Big Brother  
 Castle Rock  
 HP OpenView

IBM Tivoli  
 LorientPro  
 Logalot  
 MRTG

SiteScope  
 Somix - WebNM and Denika  
 WhatsUp Gold  
 Computer Associates Unicenter TNG

## Specifications

### Dimension

- Size : 17.08" x 5.43" x 1.80"  
 - 1U Rack Mount Standard
- Weight : 3.3 pounds

### Power Supply

- Voltage 7.5 - 9 V
- Current >= 2.5 Amp

### Inputs

- 8 RJ-45 ports for connecting AKCP sensors
- Video Input port VI-4, NTSC/PAL, Jack BNC 750 hm 30 Au
- 1 USB port (Version1.1)  
 Audio In (Analog) 2.5" jack
- RS485, 2 pin Terminal box
- Line In, 2.5" jack
- 20 Dry Contact inputs

### Network Interface

- 1 Serial port
- 1 Standard 10/100 Base-T Ethernet RJ-45 port

### Status Indication

- LED indication for Power
- LED for Network Connectivity
- LED for sensor online and threshold status

### Operating Environment

- Temperature : Min. -35° C - Max. +55° C
- Humidity : Min. 20% - Max. 80% (Non-Condensing)

### Mounting

- Optional wall mount brackets are available.
- Rack mount brackets included

### Output

- Ext. Speaker Out, 2.5" jack (Analog)
- Mic Out, 2.5" jack (Analog) (for modem application)

### Components

- Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
- 32-bit Xscale PXA270 312 mhz Processor running Linux Kernel
- 128 MB Flash memory
- 64 MB SDRAM

## Support and Warranty

- One year limited warranty, Optional 2 year warranty.
- Unlimited lifetime support.
- Includes full, easy to understand documentation.



## Environmental & Security Sensors



### Temperature Sensor

This sensor is of the semiconductor, microprocessor controlled type designed to record accurate temperature data. This sensor can be extended to 1,000 feet and has its own SNMP OID so that data can be collected over the network and graphed. There is also a waterproof version of this sensor.



### 4-20mA Current-to-Voltage Converter

The 4-20 mA signal converter is used to integrate the sensorProbe with a 4-20 mA transmitter. 4-20 mA technology is used to communicate analog signals over long distances where electrical interference is a problem.



### Temperature & Humidity Sensor

This dual sensor has both temperature and humidity measuring capabilities in a single sensor. It has its own SNMP OID so that the data can be collected over the network and graphed. There is also a waterproof version of this sensor.



### Digital Voltmeter

This sensor allows integration to a custom sensor to the sensorProbe product line while still retaining all the features of the standard sensor. The Digital Voltmeter has full range of functionality including SNMP integration, email and trap generation upon user configurable limits and thresholds.



### Thermocouple Sensor

This thermocouple sensor is designed for industrial and scientific purposes. The AKCP type K Thermocouple sensor has the ability to measure temperatures from -270 Celsius (-454 Fahrenheit) to 1372 Celsius (2501 Fahrenheit).



### Security Sensor

Security sensors can detect doors and windows being opened or closed. SNMP traps are sent when critical. The traps are generated by the sensorProbe, along with other notification types.



### Water Sensor

The water sensor is of an advanced microprocessor-based design capable of detecting distilled water. This water sensor is designed and manufactured by AKCP.



### Motion Detector

This passive infrared motion detector detects the presence of movement. Up to 10 motion detectors can be linked together and plugged into a single sensor port.



### Airflow Sensor

The airflow sensor is designed for systems that generate heat in the course of their operation and a steady flow of air is necessary to dissipate the heat. In addition to an on/off indication on the sensor's web-interface, it can graph the analog values over a period of time.



### Siren and Strobe Light

This sensorProbe accessory is a combined strobe light and siren which adds an eye-catching audio/visual alarm to the sensorProbe line.



### Sensor Controlled Relay

This sensor controls the electrical power to devices over the Internet. With its easy configuration & integration with sensorProbe products, it defines a new era in energy management.



### Universal Mount Camera

The Universal Mount Camera is a high resolution CCD Camera from Sony. It allows visual monitoring remotely from any location in the world. (compatible with SEC only)



### Dry Contact Sensor

The dry contact sensors have an ALARM/NORMAL indication in the web-interface. They are user definable and can be used to detect many different kinds of input such as UPS status, security systems or air-conditioning status.



### AC Voltage Monitor Sensor

Specially designed for monitoring AC voltage presence (or absence) up to 250 volts.