

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

# securityProbe

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, Small and Cost Effective.

**securityProbe** 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'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.

## 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

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

Intelligent monitoring solutions for your Enterprise resources!!!

# securityProbe

The securityProbe 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 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 securityProbe also supports Modbus Master/Slave, Modbus RTU and Modbus over TCP/IP creating a unique, easy to configure Modbus to SNMP gateway. The web-based interface is written in PHP allowing end-user changes such as language translation. The securityProbe has a battery backed time of day clock for accurate record keeping.



## Features

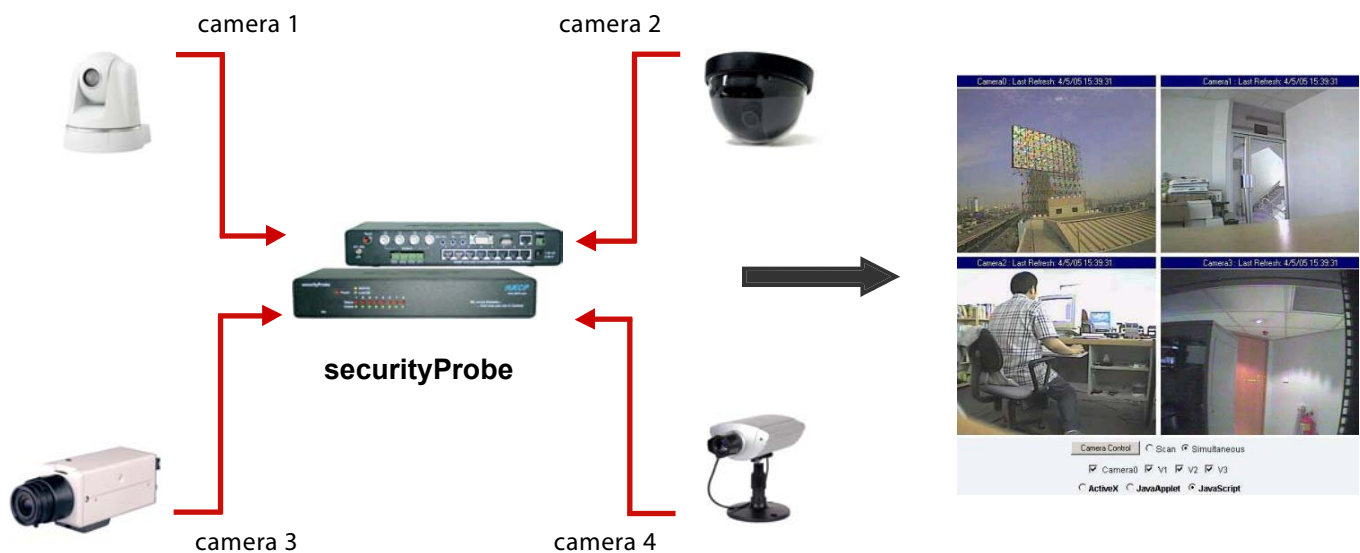
- Embedded web server displays sensor information and live video from connected cameras.
- Control PT cameras directly from the web interface.
- Record streaming video directly to remote servers or internal memory, or send live images to your own website.
- Connect up to 4 external cameras, and simultaneously 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.
- Multilingual web interface. Languages currently supported: English, German, French, Italian, Dutch, Spanish, Chinese, Korean and Japanese.
- Full Modbus support : Modbus Master/Slave, Modbus RTU, Modbus over TCP/IP

## 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



AKCP Intelligent Sensors



## Applications

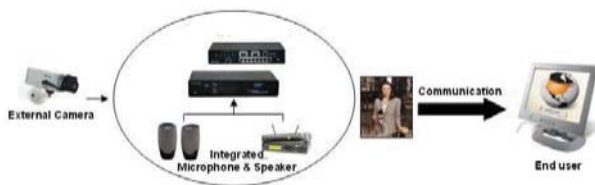
### Connect up to 4 external analogue cameras

The securityProbe 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.

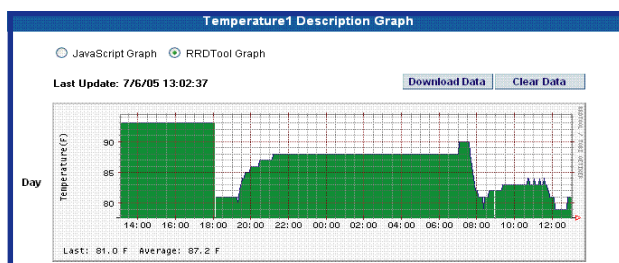
### Video Conferencing

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



### Sensor Graphing

The securityProbe 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 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. Once inserted, the sensor automatically configures itself and goes online. Our easy-to-use web based interface allows you to setup the securityProbe 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 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'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 : 10.83" x 5.43" x 1.80"  
 - (camera dome height 3.62")
- Weight : 2.4 pounds

### Power Requirements

- Voltage 7.0 - 9 V / >= 3 Amp

### Power Consumption

- Typical 6.150 Watt, 0.82A

### 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, (used for Modbus)
- Line In, 2.5" jack

### 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)

### MTBF

- 400,000 Hours

### 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)
- RS485, 2 pin Terminal box, (used for Modbus)

### 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.

# securityProbe + Camera Bundle

An IP Network based Camera Security and Environmental Monitoring Solution

The securityProbe when connected to our external Pan Tilt Dome Camera, becomes an IP Network based Camera Security and Environmental Monitoring Solution. The securityProbe integrates over 10 years of environmental monitoring experience with the latest high resolution CCD technology.



Now you can sense and see problems before they lead to business disruptions.

## External Pan Tilt Dome Camera



The AKCP Pan Tilt Dome Camera is designed to provide greater functionality to the securityProbe range of devices. Not only can you monitor assets and infrastructure remotely, combining the AKCP PTDC Camera with a securityProbe allows you to actually see any problems, from anywhere in the world.



4 pictures per event are saved in the log when the event occurs

The AKCP PTDC is designed around a high resolution CCD camera from Sony. The pictures are truly stunning even in low light conditions. The camera features AWB (Auto White Balance), and has a horizontal resolution of 640 pixels per line, with 625 lines (interlaced). The sensor is a 1/3" interline CCD. It has excellent low light sensitivity of 0.5 lux at f1.2.

Live full-color streaming video is available at up to 30 fps (320 x 240 resolution) via the web interface, and up to 50 streams of video can be accessed simultaneously. Standard JPG format pictures are used, allowing the use of third party host tools to store and analyze the JPG pictures. All pictures are in the Standard JPG format and the Standard CIF picture size is 352 x 288 pixels or VGA (640 x 480). The pictures can be easily downloaded from the securityProbe into a local host.



The BNC video input and PT controller connectors

## External Pan Tilt Camera Specifications

### Camera Control

- Remote pan and tilt (remote 330deg pan, 80deg tilt)
- Control of camera motor via web-interface (administrator only)
- Camera control port PT1-4, Pelco D RS485, 2 pins Terminal box.
- Precision, custom designed stepper motor

### Physical and Environmental

- Dimensions (Ø x H): 10.7 x 11.5 cm
- Weight: 0.8 kg
- Power: 9VDC, external
- Power consumption: 2.16 W
- Operating temp. range: 0 - 40 °C
- Operating humidity range: 10 - 80 % RH, non-condensing

### Image Sensor for Pan Tilt Dome Camera (PTDC)

- High quality Sony CCD
- Light sensitivity of .5 lux at f1.2
- 1/3" interline CCD
- Auto White Balance
- 640 pixels per line, with 625 per frame (interlaced)
- Electronic Iris: 1/50 - 1/100,000 (PAL); 1/60 - 1/100,000 (NTSC)
- Picture Elements: 640 (H) x 480 (V)
- S/N ratio: 45dB or more (AGC off)

### Optics

- Lens type: fixed
- Focal length: 3.6mm
- Viewing angle: 92 deg

### Connections

- Video: BNC Male video composite out 1 Vp-p 75 ohm
- Power: 2.1mm Male plug

## securityProbe + Camera Bundle Options.

Description	Product Code
securityProbe + 1 Pan Tilt Dome Camera	SC1-PAL
	SC1-NTSC
securityProbe + 2 Pan Tilt Dome Cameras	SC2-PAL
	SC2-NTSC
securityProbe + 3 Pan Tilt Dome Cameras	SC3-PAL
	SC3-NTSC
securityProbe + 4 Pan Tilt Dome Cameras	SC4-PAL
	SC4-NTSC

### Corporate/ Registered Office

#### AKCP Co., Ltd.

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### Support Team

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Support: [support@akcp.com](mailto:support@akcp.com)

URL: <http://www.akcp.com>

### Dealer Name

## 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.