

Sensor Control...  
Access Control...

## E-opto16

SNMP-based Environmental and Security Monitoring Solution



Applications

### Monitoring Solution for :-

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

Does maintaining your infrastructure keep you on the edge?  
Is your infrastructure designed to control the unpredictable?

## Features

- Standard RJ-45 Input and Output Ports
- Creates Dry Contact Expandability On The securityProbe 5E
- Rack Mountable 19" 1U
- Extendable Using Standard CAT5 LAN Cable
- Daisy Chainable with other expansion modules
- 16x Dry Contact Input Status LED's
- 16x 2 Wire Opto Isolated Dry Contact Ports

# E-opto16 Expansion Module

## Expand your securityProbe 5E capabilities with 16 additional dry contacts

The E-opto16 is an expansion module that adds 16 opto isolated dry contact inputs to the securityProbe 5E. It is connected to any of the (4) RJ-45 expansion ports located on the front panel of the securityProbe 5E base units using standard CAT5 LAN cable, or can be daisychained using the E-Out/E-In ports on other expansion modules.

A wide variety of equipment that generates an output signal or voltage can be connected to each of the 2 wire dry contact inputs located on the back of the E-opto16 module. The (16) dry contact input LED status is displayed on the front panel.

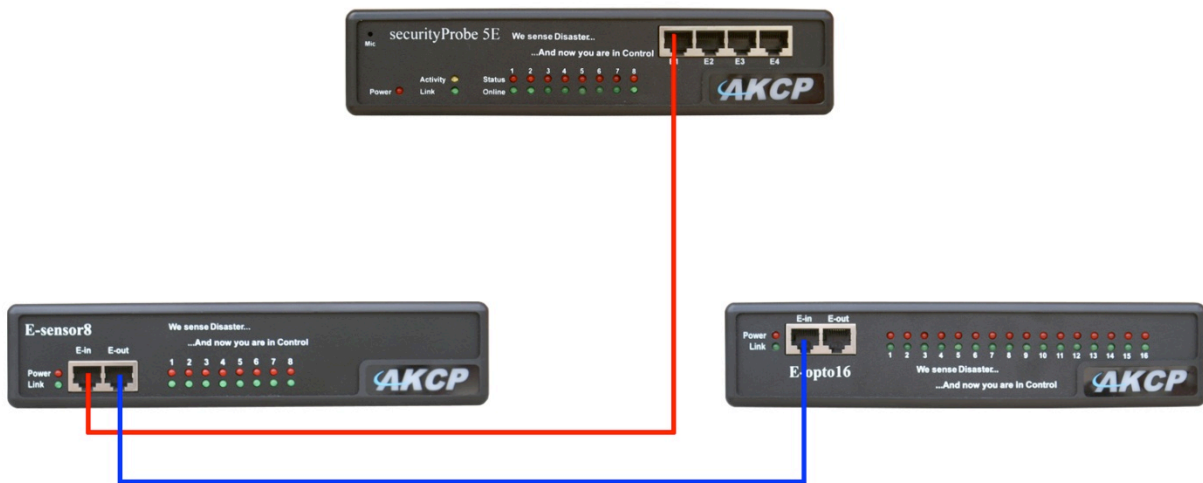
The E-modules can be extended up to 300 meters from the securityProbe 5E base unit. There is no limit to how many E-modules can be connected to a single securityProbe 5E. It depends only on the number of sensors connected. A maximum of 600 datapoints can be monitored by the securityProbe 5E base unit.

**Note:**

The 300 meter maximum run length is not the total run length of all of the E-modules combined. This is each E-modules maximum run length from either the base unit, or from each other.

A typical application for the E-opto16 would be to connect the outputs of an alarm panel to each of the 16 dry contact inputs allowing the securityProbe 5E's full featured built in notification system to be integrated into these alarm panels, or other systems that output a voltage.

## Daisy Chained Expansion Modules



The OID's for checking the expansion modules and securityProbe 5E are as follows:

The OID will start with .1.3.6.1.4.1.3854.2 for checking the sensors on the expansion modules including the E-sensor8.

This SNMPwalk command .1.3.6.1.4.1.3854.2.3.1.1 can be used for checking all of the sensors on the securityProbe 5E.

This SNMPwalk command .1.3.6.1.4.1.3854.2.2.1.1 can be used for returning the status of the expansion modules.

**Differences between the E-opto16**, the X20 and X60 extra dry contact inputs (SP8-X20/X60 & SEC-X20/X60), IO-digital8 sensor and the DCS15 (RJ-45 dry contact sensor).

The extra dry contact inputs on the X20 and X60 units can be switched from opto-isolated mode to non-opto isolated mode (jumper setting on the boards), where the E-opto16 inputs are all shipped as opto isolated and cannot be configured as non-opto isolated. Because of this, the E-opto16 inputs do require an input voltage as the module will not supply this voltage.

See the E-opto16 product manual for connecting simple switches to the modules inputs.

The extra dry contact inputs on the X20/X60 units do not require any input voltage if left in their default configuration of non-opto isolated (see the sensorProbe manual for these jumper settings).

The E-opto16 (16 opto isolated dry contact inputs) expansion unit is used when the customer requires inputs of more than 5volts DC up to 24volts DC, hence the use of the term opto-isolated.

Differences between the E-opto16 and the IO-digital8 (8 inputs or outputs on a single sensor port) and DCS15 (single input or output on a single sensor port).

Compared to the E-opto16, the IO-digital8 is for 5 Volts or less and it has the added advantage of supplying 5 Volts output at 20milliamps. This would be used if the inputs require 5 Volts or less or the requirements are a 5 Volt output. The DCS15 is the same only using a single input or output on a single RJ-45 port.

## 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  
Loriot Pro  
Logalot  
MRTG

SiteScope  
Somis WebNM and Denika  
WhatsUp Gold  
Computer Associates Unicenter TNG

#### Dimension

- Size : 8.5" x 5.43" x 1.80"
- Weight : 2.4 pounds

#### Power Requirements

- Voltage 7.0 - 9 VDC, 3 Amp

#### Power Consumption

- Typical 6.150 Watt, 0.82A

#### Inputs

- 16x 2 wire dry contact inputs configured as opto-isolated
- 2 wire dry contact inputs support up to 50 Volts DC and 80mA of current
- 1 RJ-45 expansion module input (E-in)

#### Expandable Ports

- Daisy chain multiple E-modules including E-sensor8 and E-opto16 combined
  - Uses standard RJ-45 connections and CAT5 LAN cable
  - Data transfer rate: 115.2 KBPS
  - Maximum extension cable run length: 300 meters (1000 feet)
  - 1 RJ-45 expansion module input (E-in)
  - 1 RJ-45 expansion module output (E-out)

#### Status Indication

- LED indication for Power
- LED for E-module connectivity
- LED for dry contact status
- LED for Network Connectivity
- Disconnect alarm notification from securityProbe 5E base unit
- 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

- Rack mount brackets included
- Compatible with AKCP DIN and Tray rackmount kits

#### Output

- 1 RJ-45 expansion module output (E-out)

#### Components

- Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.

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