



# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

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# ServGuard



## Key Features

- ▶ 5 internal sensors measure temperature, humidity, air flow, light and sound levels.
- ▶ Supports up to 16 additional remote sensors.
- ▶ 1U-high, 19-inch rack or bracket mountable device.
- ▶ Built-in web server.
- ▶ Supports HTTP, Telnet, SMTP, SNMP.

### Description

ServGuard is a standalone environmental control device ideal for monitoring cabinets, racks and server rooms. It contains five built-in sensors, accommodates up to 3 independent magnetic door sensors and up to 16 external sensors. The external sensors can be added while the unit is in operations, and no switches or hardware adjustments are necessary (plug and play). All sensors can have high and low alarm points set. Alarming functions are available via SMTP email and paging. Multiple addresses and alarm threshold levels can be set.

The internal processing unit collects the data and compiles the information into web pages, but it can send it also over Telnet or SNMP. When viewed through the web format, a variety of graphs are also available. Additionally, the data can be exported in XML or Microsoft Excel format.

### What's included:

- (1) ServGuard
- Installation instructions

The SNMP data allows dozens of network monitoring systems like HP OpenView, IP Sentry, MRTG or WhatsUp Gold to integrate ServGuard into the list of monitored devices. The supplied MIB automatically expands as remote devices are added, making integration straightforward.

The remote sensor 1-wire serial bus uses Cat3 cable or even telephone wire with RJ11 connectors and supports lengths of up to 300m. All remote sensors are powered from the main unit and they can be added or removed without reconfiguration or turning off the main unit.

The unit can be mounted in a 19 inch rack, on a solid surface (wall) horizontal or vertical, or simply laid on a desk by using the appropriate mounting accessories.

# Specifications

## Main unit

### Connections

- (1) RJ45 female Ethernet 10/100Mbps HDX/FDX autosense
- (1) RJ11 female 1-Wire Comm Bus port for external sensors
- (1) Terminal block for I/O (door) sensors (up to 3 sensors independent sensors, series wiring for 4 sensors or more)

### Engine

No of internal sensors: 5

Type of internal sensors: temperature, humidity, light level, sound level, air flow

### Specifications

Internal sensors:

- temperature: range: -10-°C to +80°C accuracy: ±0.5 degrees
- humidity: range: 0 – 100%, non-condensing accuracy: ±5%

- light: range: 0 – 100 lux accuracy: ±5%

- air flow range: 0 – 150cfm

- sound level: range: 0 – 200dBm accuracy: ±10%

I/O contacts (door sensors):

- range: 0 – 5VDC
- configurable as outputs 0/5VDC via software

Reading refresh rate: every 2 minutes

Supported hardware: IBM PC compatible

### Management

Indicators:  
 (1) Power, (1) Link, (1) Idle, (1) Remote sensor access, (1) Remote sensor data

Configuration:  
 via supplied setup tool

Data reading: Telnet, HTTP, SNMP, Console software for monitoring multiple units

Alerts: via email (SMTP) or SNMP  
 Data export formats: XML, Excel

### Physical/environmental

Dimensions: (W x H x D): 216 x 58 x 31mm

Operating temperature range: -25 to 60°C

### External sensors:

Temperature:  
 - connections: cable length: 6m or 30m (1) RJ11 male connector

- engine: range: -10-°C to +85°C accuracy: ±0.5 degrees

Temperature / Air flow:  
 - connections:

cable length: 3.5m (1) RJ11 male connector

- engine: temperature – same as above  
 air flow: range: 0 – 150cfm accuracy: ±25%

Water:  
 - connections: cable length: 6m (1) RJ11 male connector

- engine: range: 0 – 100% non condensing accuracy: ±30%

## Ordering information

ITEM	CODE
ServGuard .....	.EMS060
Temperature and Air flow sensor .....	.EMS0TA1-012
Water sensor .....	.EMS0W1-020
WebCam, external .....	.EMS0C2-001
Door sensor, magnetic .....	.EMS0D1-030

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