

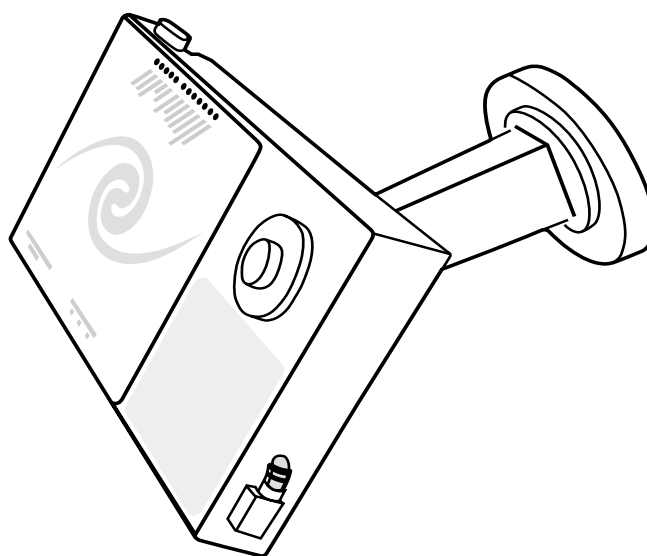


# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### Remote Supervisor

#### Wallmount Remote Supervisor



#### Key Features

- ▶ Web-accessed
- ▶ Integrated camera (LES2300AE-WM400C with color Camera)
- ▶ Sensors
  - Temperature
  - Humidity
  - Airflow
  - Audio
  - Door open
- ▶ Contact - Door Open
- ▶ Self-contained
- ▶ Wall-mounted, simple installation
- ▶ E-Mail and pager alerts
- ▶ Compatible with enterprise monitoring software such as Tivoli NetView, HP OpenView and other IP/SNMP-based monitoring solutions

The Wallmount Remote Supervisor is a web-accessed, environment-monitoring appliance in a book-sized package. Completely self-contained, the unit continually checks the room environment, including temperature, humidity, audio, and airflow. Alarms are sent via email and pager when a connected device's environment condition is out of range. A built-in camera records individuals accessing the server room and allows both the customer and technician to easily view the condition of equipment via an internally generated web page. The Wallmount Remote Supervisor is also SNMP compliant, appearing as an object within your existing network management system. User-defined alarms are sent via pager and email notification to designated personnel.

#### Benefits

- Provides advanced warning of equipment failure
- Reduces downtime and associated costs
- Provides 24-hour remote access, from Anyplace, Anytime
- Monitors environment conditions of server room
- Low roll-out cost
- Monitors Internal Environment Conditions of the Server Room
- Monitors Operating Conditions of Equipment
- Monitors Status of Network Interfaces
- Reduces Downtime and Associated Costs

## Specifications

**Temperature Range** — 2 ° to 50 ° C,  
Accuracy: +/- 2 ° C  
Sensor: solid state.

**Relative Humidity Range** — 10 %  
to 90%, Accuracy: +/-10%

**Air Flow Rate** — 0-400 Feet Per  
Minute, 40 fpm increments

**Audio** — Built-in acoustic sensor  
detects audio above specified level.  
Sensor: electrostatic microphone

**Contact Sensing** — Alarm On: con-  
tacts open or closed (Magnetic door  
sensor supplied).

**Camera** — Black and white  
(LES2300AE-WM400C with color  
Camera), 87 degree lens, resolution no  
less than 350 x 280 pixels. Saved ima-  
ges are time/date stamped.

**Housing** — Wall mount, 13cmW x  
17cmH x 2.7 cmD, 16 gauge aluminum

**Connectors Ethernet** — RJ45 to Cat  
5 network wiring.

Serial: DB-9 receptacle. Power: 5mm  
barrel jack for 5 VDC power.

Contact sense: 2.5 mm audio-style jack  
**Data Speed** — Ethernet 10 Mbps  
(10Base-T)

**Protocols** — TCP/IP, HTTP, SMTP,  
SNMP, POP, DHCP, DNS

**Web Pages** — Supports Netscape  
Communicator 4.7 or later, or Microsoft  
Internet Explorer 5.5 or later. Usage of  
the advanced interface requires a one-  
time download of the Java Runtime  
Environment Plug-in from Sun  
Microsystems.

**Processor** — ARM

**Memory** — 6MB

**Indicators Power** — On, temperature  
out-of-limit, humidity out-of-limit, air-  
flow out-of-limit, sound detected, contact  
closure detected, equipment condition  
detected, and Ethernet activity.

**Power Supply** — Wall receptacle type  
+5 VDC, 1A regulated, 10 feet cord

**Limited one year warranty**

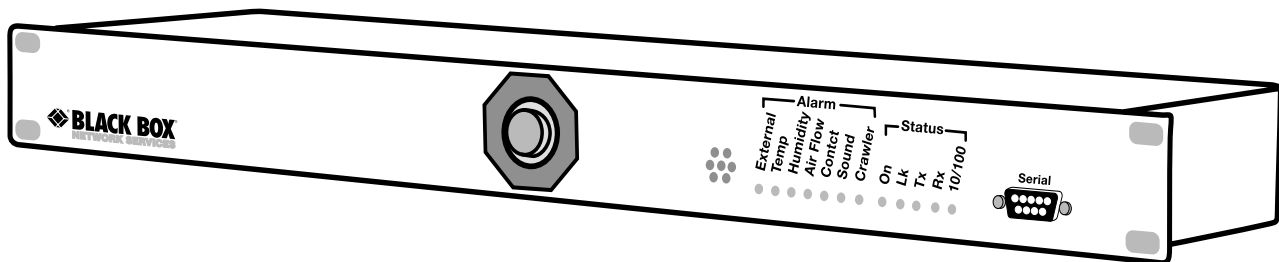
## Ordering information

### ITEM

### CODE

Wallmount Remote Supervisor 300B . . . . .	LES2300AE-WM300B
Wallmount Remote Supervisor 310 . . . . .	LES2300AE-WM310
Wallmount Remote Supervisor 400C . . . . .	LES2300AE-WM400C
Remote Supervisor External Temperature . . . . .	LES2300AE-ETS

# Rackmount Remote Supervisor



## Key Features

- ▶ Web-accessible
- ▶ Integrated camera
- ▶ Integrated Sensors
  - Temperature
  - Humidity
  - Airflow
  - Audio
  - Door open
- ▶ Easy to Install & Maintain
- ▶ Self-contained
- ▶ Contact - Door Open
- ▶ External Sensors (optional)
  - Amperage level
  - Second Temperature
  - Dry Contact Sensors
- ▶ E-Mail and pager alerts
- ▶ Fits a 1U rack space
- ▶ Compatible with enterprise monitoring software such as Tivoli NetView, HP OpenView, CA Unicenter, Ipswitch Whats Up Gold and other IP/SNMP-based monitoring solutions

The Rackmount Remote Supervisor is a web-accessible, environment-monitoring appliance that checks the internal environment conditions of an equipment cabinet such as temperature, humidity, audio, and airflow. Alarms providing you with advanced warning of equipment failure are sent via email and pager when a connected devices condition is out of range. A built-in camera records individuals accessing the rack or cabinet and allows both the customer and technician to easily view the condition of equipment via an internally generated web page. Three external sensor ports are available for optional add-on sensors, which currently include amperage level and an external temperature sensor. The Rackmount Remote Supervisor is also SNMP compliant, appearing as an object within your existing network management system. User-defined alarms are sent via pager and email notification to designated personnel.

## Benefits

- Provides advanced warning of equipment failure
- Eliminates downtime and associated costs
- Provides 24-hour remote access, from Anyplace, Anytime
- Self-learning
- Monitors internal environment conditions of cabinet
- Low roll-out cost
- Monitors Internal Environment Conditions of the Cabinet
- Monitors Operating Conditions of Equipment
- Monitors Status of Network Interfaces
- Provides Advanced Warning of Equipment Failure
- Reduces Downtime and Associated Costs

## Specifications

**Temperature** — Range: 2 ° to 50 ° C, Accuracy: +/- 2 ° C  
Sensor: solid state.

**Relative Humidity** — Range: 10 % to 90%, Accuracy: +/-10%

**Air Flow Rate** — 0-400 Feet Per Minute, 40 fpm increments

**Audio** — Built-in acoustic sensor detects audio above specified level.  
Sensor - electrostatic microphone

**Contact Sensing** — Alarm on: contacts open or closed (Magnetic door sensor supplied).

**Camera** — Black and white, 87 degree lens, resolution no less than 350 x 280 pixels. Saved images are time/date stamped.

**Housing** — 19" rack mount, 1-U, 20 gauge steel

**Connectors** — Ethernet: RJ45 to Cat 5 network wiring.

Serial: DB-9 receptacle. Power: 5mm barrel jack for 5VDC power. Contact Sense: 2.5 mm audio-style jack.

**Data Speed** — Ethernet 10Mbps (10Base-T)

**Protocols** — TCP/IP, HTTP, SMTP, SNMP, POP, DHCP, DNS

**Web Pages** — Supports Netscape Communicator 4.7 or later, or Microsoft Internet Explorer 5.5 or later. Usage of the advanced interface requires a one-time download of the Java Runtime Environment from Sun Microsystems.

**Processor** — ARM

**Memory** — 6MB

**Indicators** — Power On, temperature out-of-limit, humidity out-of-limit, air-flow out-of-limit, sound detected, contact closure detected, remote equipment condition detected, and Ethernet activity.

**Power Supply** — Wall receptacle type +5VDC, 1A regulated, 10 feet cord

**Limited one year warranty**

## Comparison Table Wall- and Rackmount Remote Supervisor

	LES2300AE-WM300B	LES2300AE-RM303	LES2300AE-WM310	LES2300AE-RM400/ LES2300AE-WM400	LES2300AE-WM400C
Environment Sensors	✓	✓	✓	✓	✓
Alerts via E-Mail, SNMP, HTTP, FTP	✓	✓	✓	✓	✓
Web-Accessible	✓	✓	✓	✓	✓
Camera - realtime image & alerts	✓	✓	✓	✓	✓
Periodic Data Export via E-Mail, HTTP, FTP	✓	✓	✓	✓	✓
External Sensor Ports		3	3	7	✓
Swivel Bracket			✓	✓-WM	✓
Color Camera					✓
<b>Software Support</b>					
Device Crawlers	✗	✗	✗	✓	✓
Camera Enhancement			✗	✓	✓
Motion Sensing	✗	✗	✗	✓	✓
Branch Network Checker	✗	✗	✗	✗	✗
✓ = Standard ✗ = Additional-Cost Option					

## Ordering information

### ITEM

### CODE

Rackmount Remote Supervisor 303 .....LES2300AE-RM303  
 Rackmount Remote Supervisor 400 .....LES2300AE-RM400  
 Remote Supervisor External Temperature .....LES2300AE-ETS

# Central Remote Supervisor



## Key Features

- ▶ Powerful tool for centralized monitoring & management of multiple sites or cabinets
- ▶ Arrange remote monitoring appliances into groups for mass configuration operations, graphing & reporting
- ▶ Easy-to-navigate, straightforward interface
- ▶ Operations are virtually instinctive
- ▶ Map View gives high-level view, Table View presents sensor detail in compact format
- ▶ View pictures for a group of appliances; Zoom on detail
- ▶ Administrator controls which appliances each user can access and operations they are allowed to perform
- ▶ Access to past alerts by group/date/appliance
- ▶ Web-accessible
- ▶ Scalable architecture to manage hundreds of Remote Supervisor appliances

**C**entral Remote Supervisor and **Wallmount/Rackmount Remote Supervisor** monitoring appliances combine to provide a comprehensive solution for IT environment and equipment. With Central Remote Supervisor, you can instantly view environment readings and a camera image from any site on your network where a Remote Supervisor monitoring appliance has been deployed. If environment readings for a site go outside of thresholds you have set, the icon label for that site turns red in the Central Remote Supervisor Map View. A Table View presents users with a table that shows all current sensor data for Remote Supervisor appliances in a selected group, allowing users to see at a glance where there is an alarm condition. Historical alarm data is quickly accessible by appliance and date.

Central Remote Supervisor works with logical, dynamically updated 'groups' of Remote Supervisor appliances that you set up. Your IT group saves time by executing configuration and threshold operations against an entire group at once. You have powerful analytical capabilities at your disposal with the Graph and Report views, where you can generate graphs or reports to display sensor data for one or more appliances over a specified date/time range. Data can be exported for use in other applications. The administrator of Central Remote Supervisor can choose precisely what capabilities to grant to each user and which groups or appliances they can access.

## Specifications

**Network Interface** — Ethernet 10/100 Mbps

**Case Type** — 19" 1U Rack Mount

**Dimensions** — HxBxT: 4.4x44x49 cm

**Power Supply** — 115/230VAC, 60/50Hz, 6/3Amp, 150W

**Client Operating Systems** —

Windows 2000, Windows NT 4.0,

Windows 98 SE, Windows Me

**Client Browsers** — Microsoft Internet

Explorer 5.5 or later; Netscape 4.76 or later

**Screen Resolution** — 1024 x 768 recommended

## Benefits

- ▶ Provides advanced warning of equipment failure so you can act before systems go out
- ▶ Increases system availability; Reduces downtime costs
- ▶ Centralized tool improves monitoring efficiency, IT users more productive
- ▶ Graphing, reporting, exporting tools make it easy to analyze trends and assist in planning
- ▶ Promptly deal with unauthorized accesses to equipment
- ▶ Straightforward implementation and administration; Low 'overhead' costs

## Ordering information

ITEM	CODE
Central Remote Supervisor, incl. HW, SW-license to monitor 25 nodes . . . . .	.LES2300AE-CEN
Central Remote Supervisor, SW-license to monitor 25 nodes . . . . .	.LES2300AE-SW25
Central Remote Supervisor, SW license to monitor 50 nodes . . . . .	.LES2300AE-SW50
Central Remote Supervisor, SW-license to monitor 100 nodes . . . . .	.LES2300AE-SW100
Remote Supervisor Device Crawler . . . . .	.LES2300SW-DC
Remote Supervisor Integration package CA Unicenter TNG V1.0 . . . . .	.LES2300SW-CA
Remote Supervisor Integration Package HP Openview V1.0 . . . . .	.LES2300SW-HP
Remote Supervisor Integration Package What'sUp Gold V1.0 . . . . .	.LES2300SW-WU

# Remote Supervisor Last Call Paging Module



## Key Features

- ▶ Emergency alphanumeric page if power is lost; sufficient battery power to keep trying for 2 hours.
- ▶ Emergency alphanumeric page if network connection is lost.
- ▶ Alphanumeric paging available for all Remote Supervisor appliance alerts.
- ▶ Supports 6 national paging services and up to 5 custom service providers (TAP v1.8-compliant).

## Benefits

- ▶ Immediate pager notification in the event of power loss at network equipment location.
- ▶ Immediate pager notification if network connectivity lost at remote locations.
- ▶ Paging notification for any or all Remote Supervisor environment and access alerts.

## The Last Call Paging Module adds important new features to Remote Supervisor 400 Series monitoring appliances.

First, in a power outage or network unavailability situation, Last Call will send a page to notify IT management of the situation. With a 2-hour battery reserve, Last Call will continue retrying the page until it is successful. Second, Last Call provides a direct paging alert mechanism for all alerts from Remote Supervisor 400 appliances. Paging is set up in a similar manner to the other Remote Supervisor appliance alert mechanisms — e-mail, SNMP, HTTP, and FTP. Last Call has a one-year warranty.

## Elevator Statement

For I.T. managers who need to know immediately when a remote site has lost power or network connectivity, the Remote Supervisor Last Call paging module pages designated I.T. personnel when either of these conditions is detected. In addition, Last Call enables paging alerts to be sent for any alert condition supported by Remote Supervisor 400 Series appliances.

## Customer Problem & Qualification

### Problems / Why Important / Consequences if not addressed

- ▶ When a remote site loses power, IT management must be notified immediately. An out-of-band communications mechanism and battery backup are required.
- ▶ If a remote site loses network connectivity, IT management must be notified immediately. An out-of-band communications mechanism is required.
- ▶ Many customers need their Remote Supervisor monitoring appliances to interface directly to a paging network for all alerts. They may not have a paging server that can translate e-mails into text messaging.

### Qualifying the Opportunity

- ▶ Does the customer want paging notification for environment and/or camera alerts?
- ▶ Is the customer concerned about a scenario where their Remote Supervisor appliances would stop working or unable to send environment and/or camera alerts due to a power or network outage?
- ▶ Is the customer concerned about receiving immediate notification in the event of a loss of power or network connectivity to I.T. equipment at a remote site?

## Paging Notification Upon Loss of Power or Network

- ▶ Last Call detects Remote Supervisor 400 appliance power outage and switches to battery power (only Last Call remains powered) — 2 hours reserve. Last Call then makes paging calls to specified contact(s).
- ▶ If the Remote Supervisor 400 appliance loses connectivity to the e-mail server or loses its network link, Last Call will make paging calls to specified contacts.
- ▶ Last Call alarm will contain last saved set of sensor values (no more than 5 minutes old).
- ▶ If line is in use or paging number is busy, Last Call will retry as long as battery power remains (has advanced algorithm to maximize chance for successful page).
- ▶ Upon restoration of power or e-mail connection to Remote Supervisor 400 appliance, Last Call sends notification page of restored power or connection.

## Sensor Alert Paging

- ▶ Last Call supports paging alerts for any or all Remote Supervisor 400 appliance alert conditions. Paging becomes another alert mechanism in addition to e-mail, SNMP, HTTP, and FTP.
- ▶ For sensor alert pages, Last Call will retry two times if initial attempt unsuccessful.

## Installation & Configuration

- ▶ Simple, straightforward install – mount the Last Call module, connect the telephone cable to a wall jack, connect the SensorBus cable to the Remote Supervisor 400 Series appliance. Through Last Call screens in Remote Supervisor Advanced View interface, configure paging services and accounts, then select which alert conditions to page on.

## Paging Support & Configuration

- ▶ Configuration screens in BotzWare Advanced View for setting up and managing list of paging providers.
- ▶ Manage list of up to 5 pager numbers (fields include pager#, ID code, name).
- ▶ Supports these national paging services, preconfigured and ready to use: Sprint PCS, Nextel, VoiceStream, AT&T Wireless, Arch Wireless, SkyTel.
- ▶ Configure up to 5 custom TAP 1 version 1.8-compliant service providers.
- ▶ Supports alphanumeric pagers.

## Other

- ▶ Connects to SensorBus port on 400 Series Remote Supervisor appliances – Powered by Sensor Bus supply voltage. – Backup module power source charged when 400 Series appliance is powered normally.
- ▶ Help pushbutton on module can be configured to page any or all of the 5 pagers.
- ▶ Rubber pads or feet for setting on tabletop; Keyhole-type cutout for hanging on wall.
- ▶ SensorBus cable (3m) and RJ11 telephone cable (2m) included.
- ▶ Intended use: intended for continuous power environments; battery life and construction sufficient for hundreds of outage events.
- ▶ Last Call software is upgradeable via BotzWare software.
- ▶ Supported in U.S. and Canada only at release.
- ▶ User specified tone or pulse dialing and modem speaker on/off.
- ▶ Last Call works only with Remote Supervisor 400 Series appliances; it cannot be used with 303, or 310 appliances.

## Ordering information

ITEM	CODE
Remote Supervisor Last Call .....	LES2300AE-LC

## Black Box Network Services - The world's largest network services company

We are, with 25 years of experience, the world leader in network infrastructure services.

**On the Phone** — no charge, answer calls in less than 20 seconds, find the right product with our technical experts.

**On-site** — superior design and engineering, Certified installations, end-to-end service.

**On-line** — receive technical knowledge on-line, including technology overviews, BLACK BOX Explains and the Knowledge Box.

**Most comprehensive TECHNICAL SUPPORT** — our best Product! Free hotline TECH SUPPORT!

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