IED GLOBALCOM®

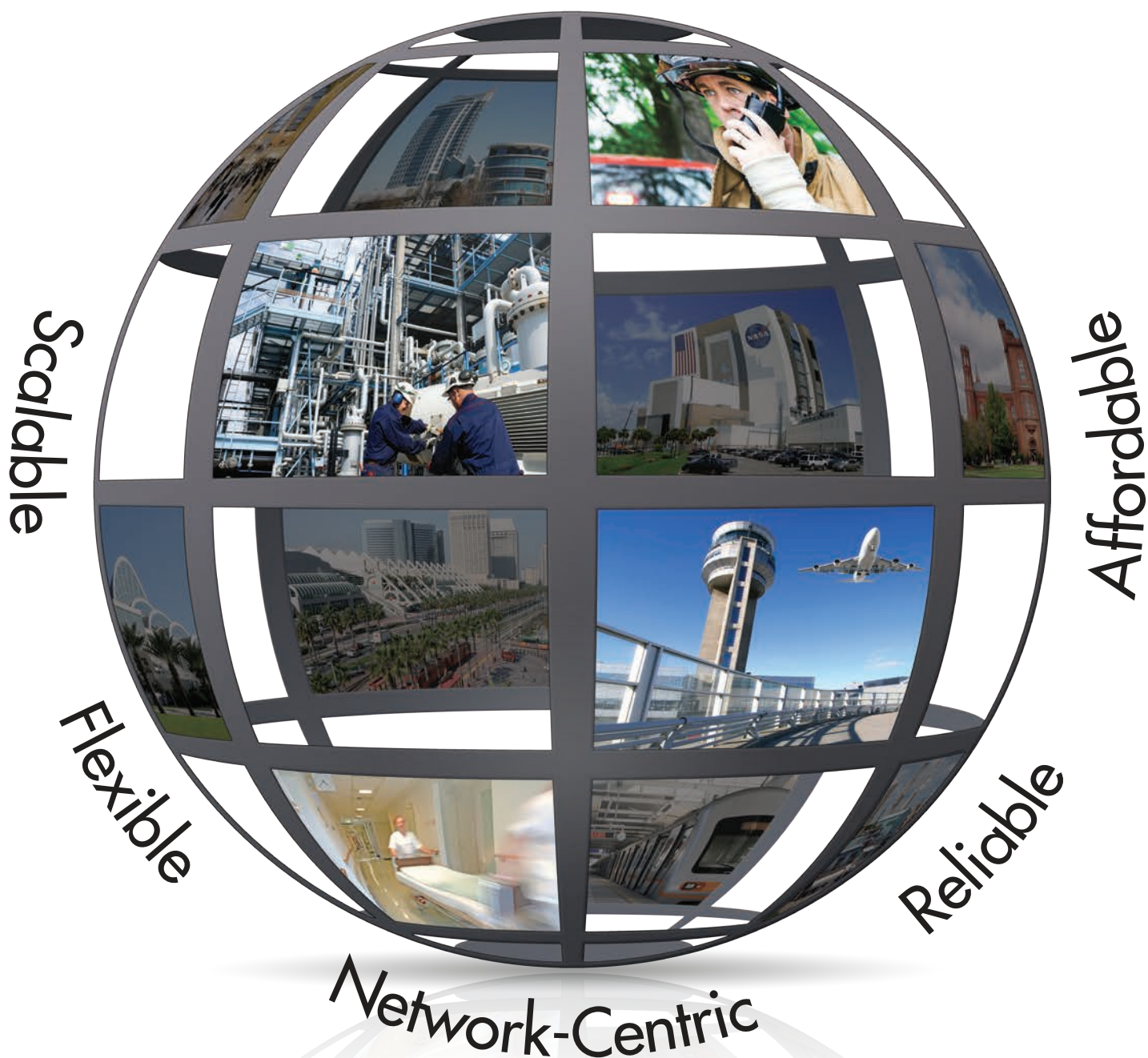## Announcement Control System

Scalable

Affordable

Flexible

Reliable

Network-Centric

Transportation • Life Safety • Industrial • Healthcare

Mitek Green Engineering - Better Technology for Greener Living

Experience

Through over 30 years of announcement system experience, IED has learned that flexibility in design is critical. Not only does each individual system have its own requirements, but every system must be able to adapt and change as functionality and priorities evolve.

No matter the size, space, or complexity of the announcement system required, GLOBALCOM is suited to fit the application with superior reliability, easy installation, and simplified user interface.

Legacy Products

500ACS

8000 SERIES

508HFM

500HFM

MODEL 540

What is GLOBALCOM?

GLOBALCOM is a new series of Announcement Control Systems that are network-centric to eliminate the need for large head-end equipment room installations. It moves processing and intelligence to the edge of the network, yet maintains overall system control and management at the core. This innovative distribution system simplifies installation and significantly reduces costs by integrating with industry-standard structured cabling and network infrastructure.

The core application for GLOBALCOM is the 1000vACS Virtual Announcement Control System software. This application operates on commercial off-the-shelf Microsoft Windows servers or the dedicated 1100 and 1200 series hardware platforms from IED. The network-centric architecture provides announcement management of IED network appliances and comprehensive audio and visual messaging services. The unprecedented scalability of the 1000vACS allows it to be economically used in systems requiring only a few zones or in diverse systems requiring thousands of zones and control points. IED is committed to reducing hardware requirements in order to maintain system efficiency and reduce power consumption in any installation.

IED is the world leader in advanced paging systems. GLOBALCOM and the 1000vACS mark the next generation Announcement Control System for IED, and it is the choice for superior paging and messaging services in facilities of all sizes.

1100ACS
Announcement Controller

Features

- Each announcement controller can manage up to 250 microphone stations and 512 Zone Outputs
- Flexible announcement delivery utilizing live, delayed, and pre-recorded messages
- Optional Text-to-Speech engine capable of generating announcements in multiple languages
- Automatic level adjustments based on the ambient noise level
- New Event Messaging allows multiple actions to be tied to a single event that can be triggered from a microphone station or external device
- Seamless integration with existing IED 510/520ACS installations
- Enhanced device-specific page control
- 65,535 levels of announcement priority
- Up to 180 simultaneous announcements and messages can be made on a single LAN or VLAN
- Incident-specific instructions can be programmed to appear on displays
- Flexible emergency announcement capability such as system muting, multiple evacuation messages, and visual emergency message display
- Easy system backup and restoration of configuration files
- Easy-to-use vACS control console for system configuration
- Built-in wizards to assist in application-specific system configuration
- Integrated support for visual paging for enhanced message delivery and ADA compliance

Message Types

Live
Announcements from microphone stations are routed directly to the zone output power amplifier mainframes over the network. The audio is in real time with no discernible latency.

Delayed
Announcements from microphone stations are recorded to memory instead of playing through the system live. As soon as the microphone switch is released, the message will play back to the programmed zones as soon as they are available.

Recorded
An extensive library of pre-recorded multi-lingual messages is available and stored on the internal drive as message take files. A message can be a single message take or multiple message takes chained together. These messages are triggered to automatically play on a set schedule or play as the result of an action at a microphone station or an input from an external system.

Dynamic Assembled
In addition to manually programming recorded messages, the system has the ability to dynamically change messages based on user input from a microphone station, console application, or external data source.

Text-to-Speech
The Text-to-Speech (TTS) option adds an engine capable of creating life-like speech renderings of messages based on text that was typed into the system or supplied by an external data interface. This allows virtually unlimited message possibilities and the creation of completely new message on the fly.

Network-Centric

GLOBALCOM utilizes standard network infrastructure for all audio and control transmissions. Audio is passed between devices on a local area network (LAN) utilizing Layer 2 CobraNet. GLOBALCOM contains the enhanced capability of transmitting and receiving audio for non-adjacent zones between LANs or VLANs by transmitting full bandwidth audio in real time utilizing routable Layer 3 protocols. This enables a complete system to be created on a Wide Area Network (WAN) that spans much larger geographic locations. GLOBALCOM offers a significant improvement in both audio quality and overall system performance over traditional VoIP systems.

Layer 3
Routing

Layer 2
Switching

Layer 3 routable full bandwidth audio over a WAN in real time

GLOBALCOM components are compatible with the IED Titan series networked audio distribution and control products as well as the 524 and 528 series of digital paging stations.

528VFM-H
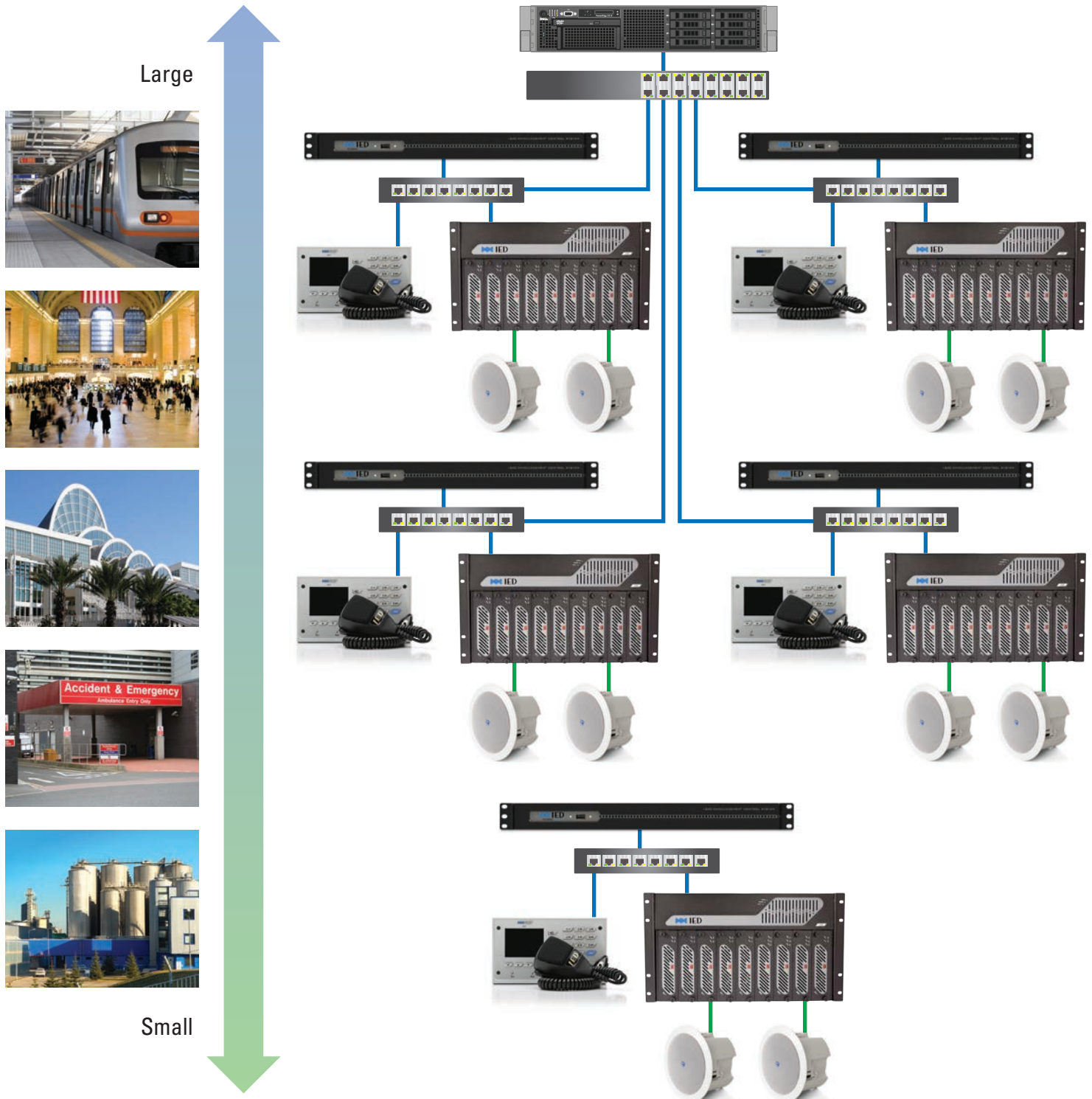Digital Communication Station

T9160
Integrated Power Amplifier

524-H
Digital Microphone Station
(Shown with optional 528DTB desktop base)

Every facility deserves the benefits of an IED Announcement Control System. Now they can afford it!

Scalable

At the heart of GLOBALCOM is a set of core building block components used to construct a system of the appropriate size and functionality needed for the application. Systems can range from small to very large. A small and simple system may consist of a single announcement controller with integrated messaging and a small number of input and output devices. Larger systems are built using multiple announcement controllers linked together to function as a single system with thousands of outputs.
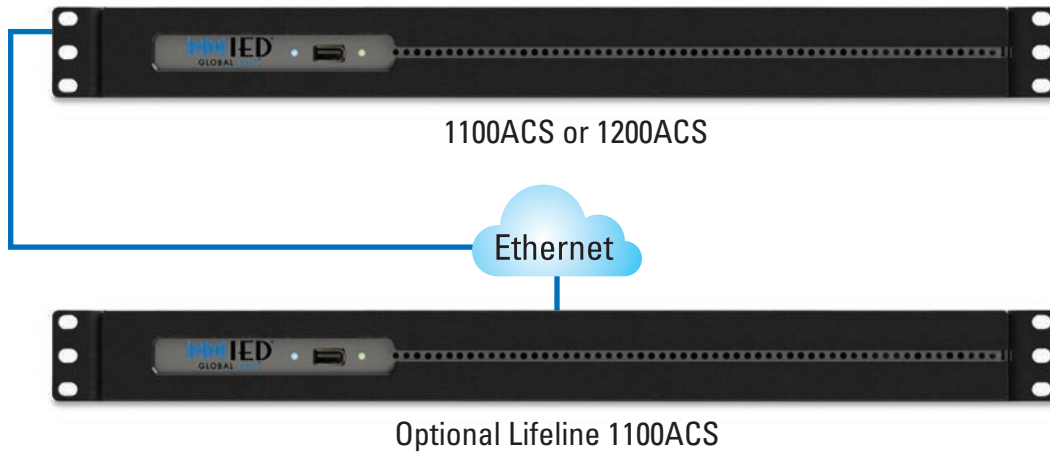
Large

Small

GLOBALCOM is network-centric to maximize the power of the network, minimize equipment requirements, and distribute processing to the network edge.
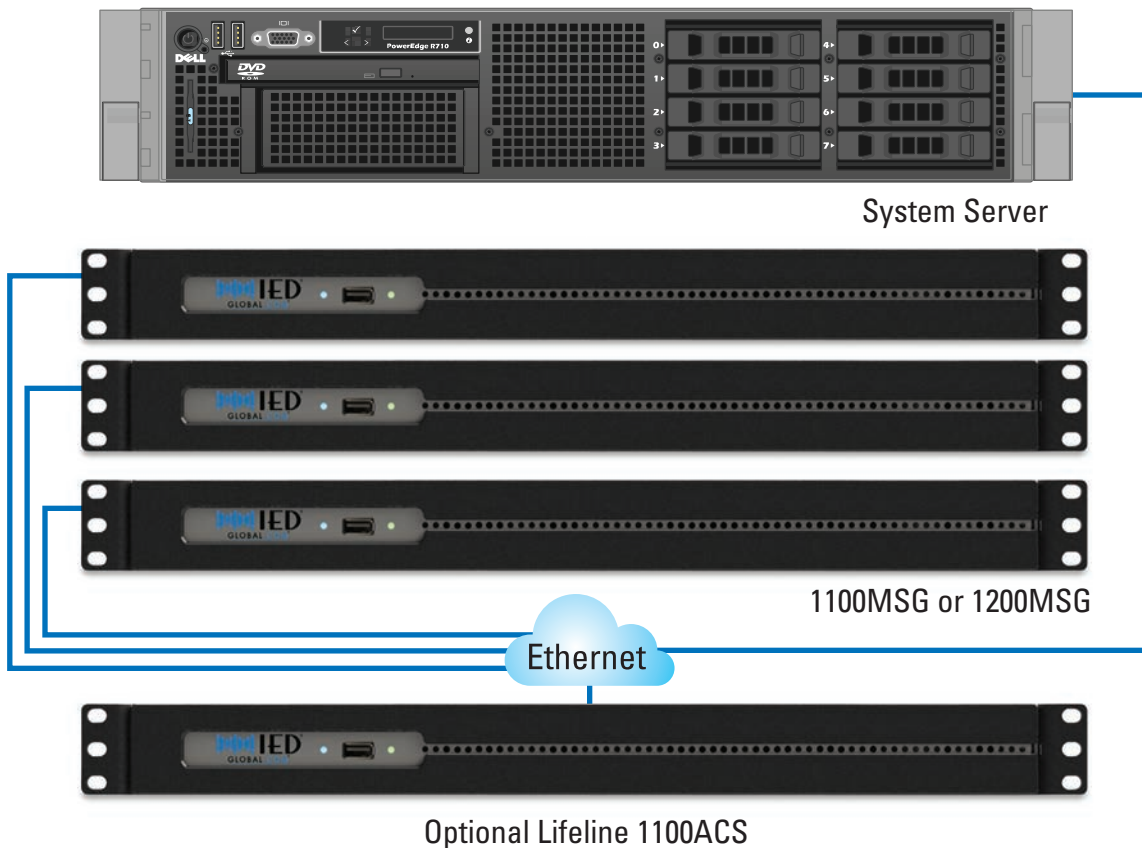
Flexible

GLOBALCOM's Flex-Architecture allows deployment to be matched to the feature set, size, budget, and fail-safe redundancy requirements necessary for the most critical applications. GLOBALCOM, along with the Titan Digital Distribution System, is designed to distribute audio and control on a standard Ethernet network and provide a cost-effective installation by using standard structured premises cable. It is also easily integrated to expand existing legacy or digital versions of IED Announcement Control Systems.
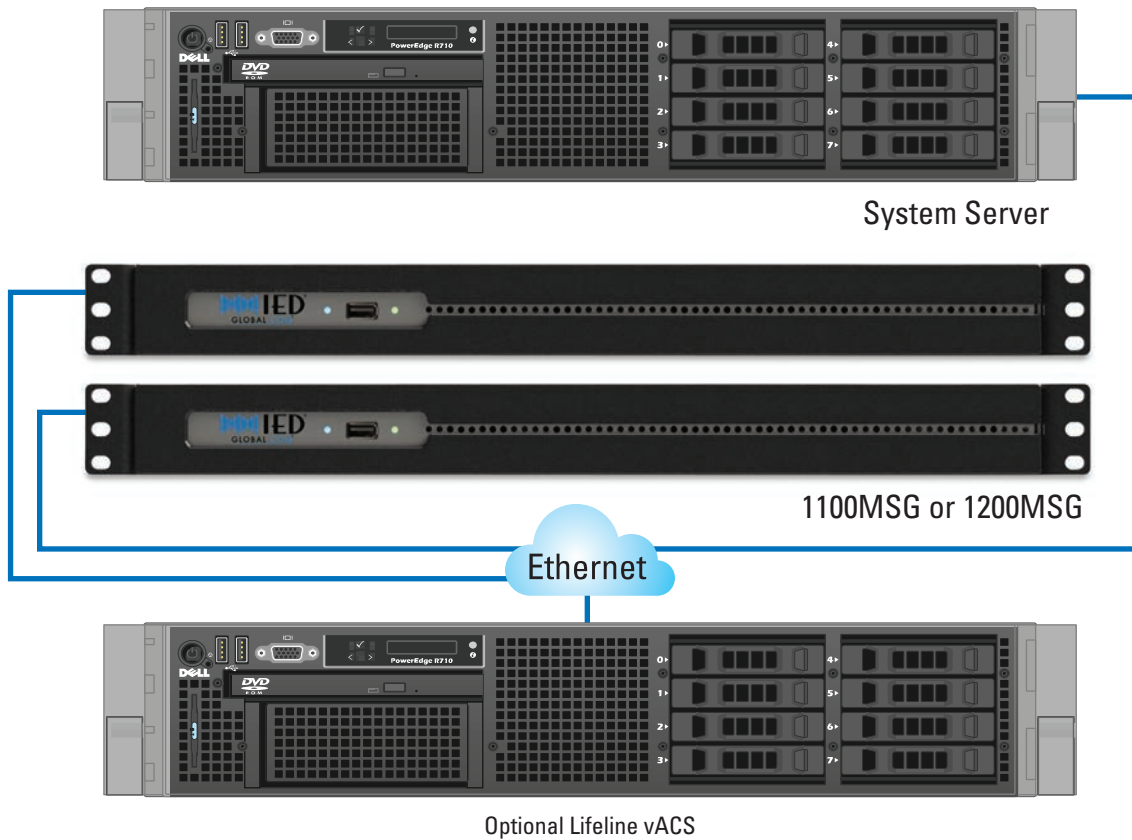
Single 1100ACS Controller
• Small Systems and Facilities with Limited Budgets •
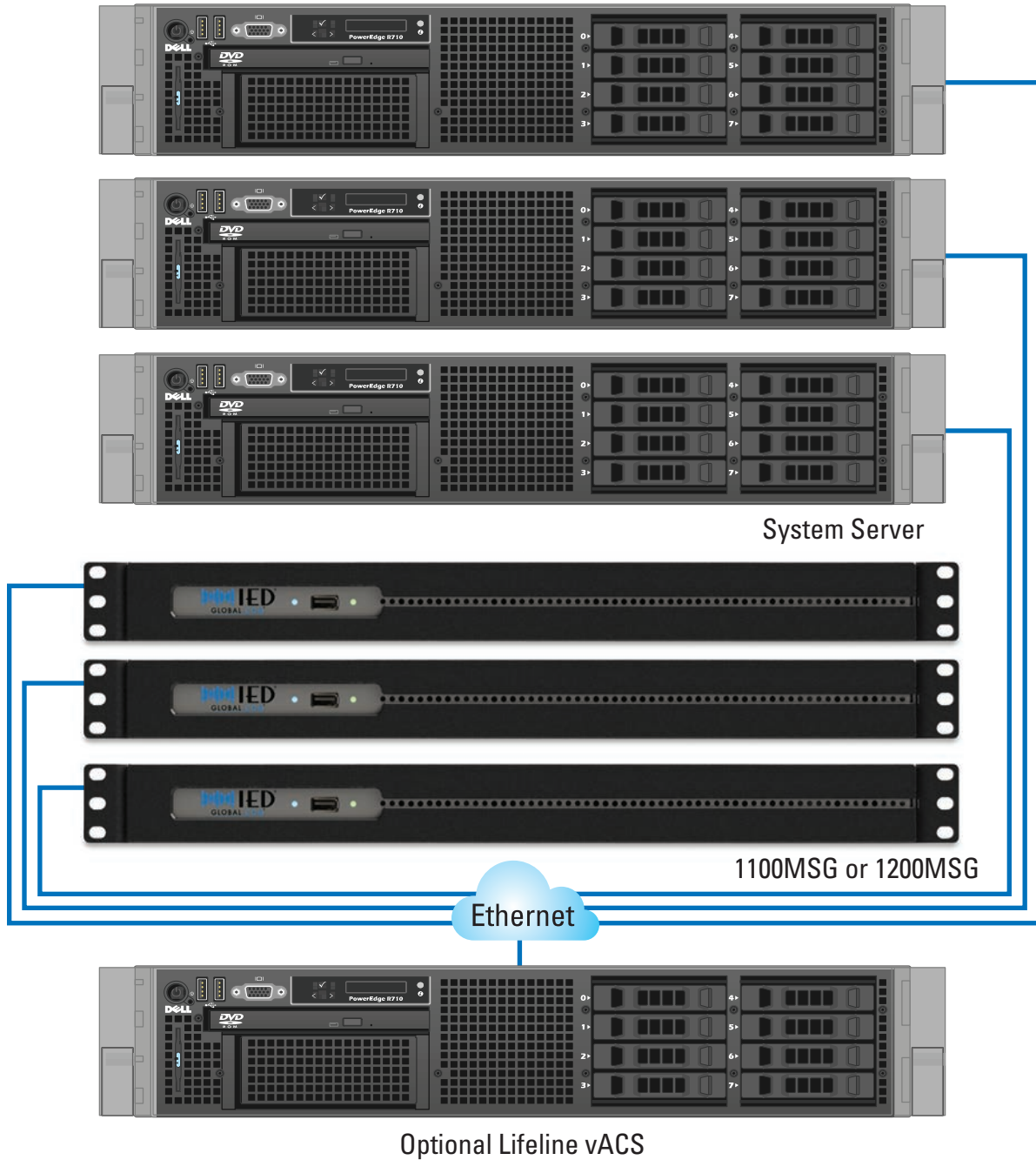

1100ACS or 1200ACS

Ethernet

Optional Lifeline 1100ACS

Multiple 1100ACS Controllers Peer-to-Peer
• Medium to Large Systems with Distributed Nodes •

System Server

1100MSG or 1200MSG

Ethernet

Optional Lifeline 1100ACS

Server Based Controller with 1000vACS Software
• Medium to Large Systems Desiring Centralized Equipment •
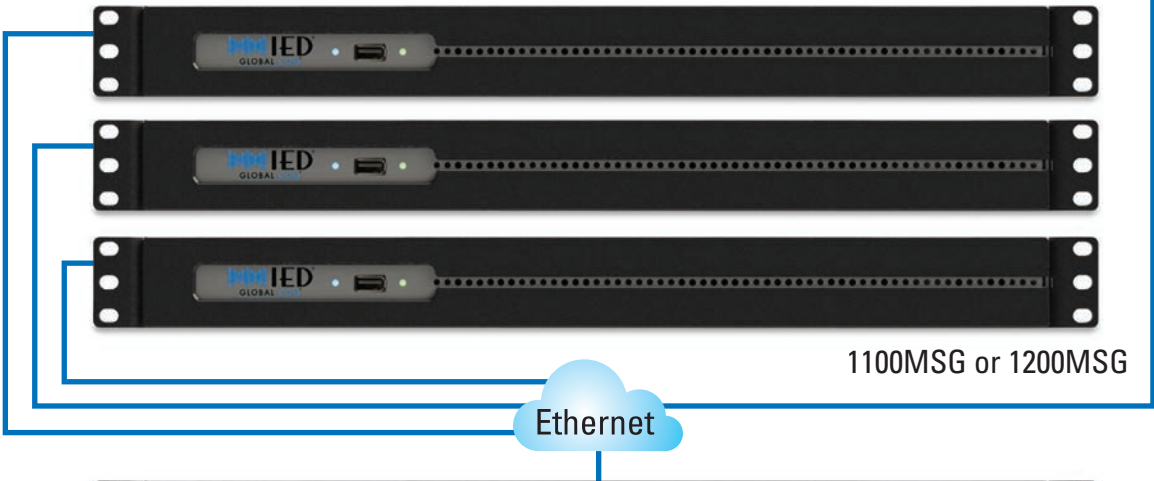
System Server

1100MSG or 1200MSG

Ethernet

Optional Lifeline vACS

Multi-Server Based Controller with 1000vACS Software
• Large Distributed System with Active IT Department •

System Server

1100MSG or 1200MSG

Ethernet

Optional Lifeline vACS

Virtualized Server 1000vACS Software and 1100MSG/1200MSG Message Servers
• All Size Systems with Active IT Department •

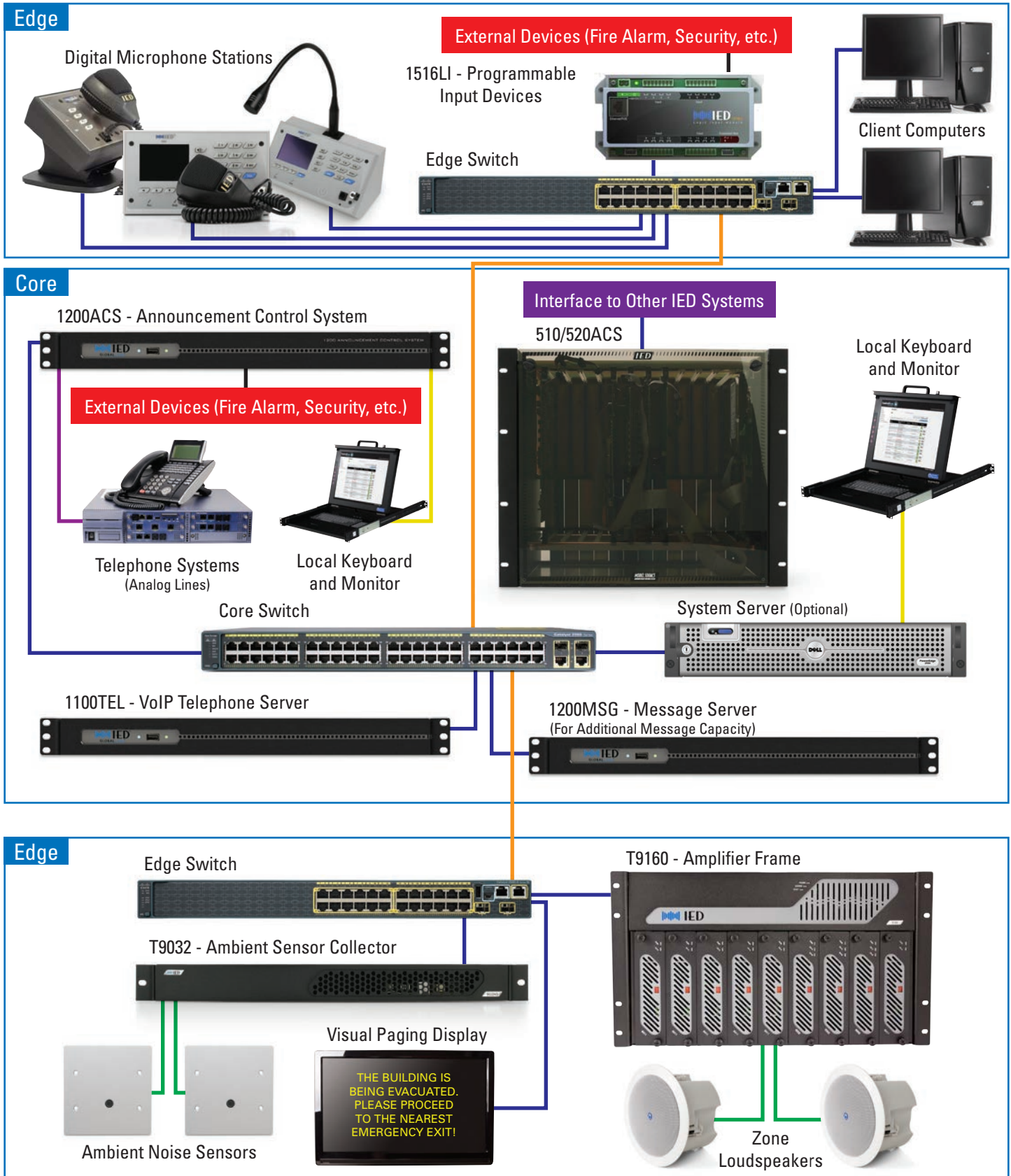

Virtualized Blade Server

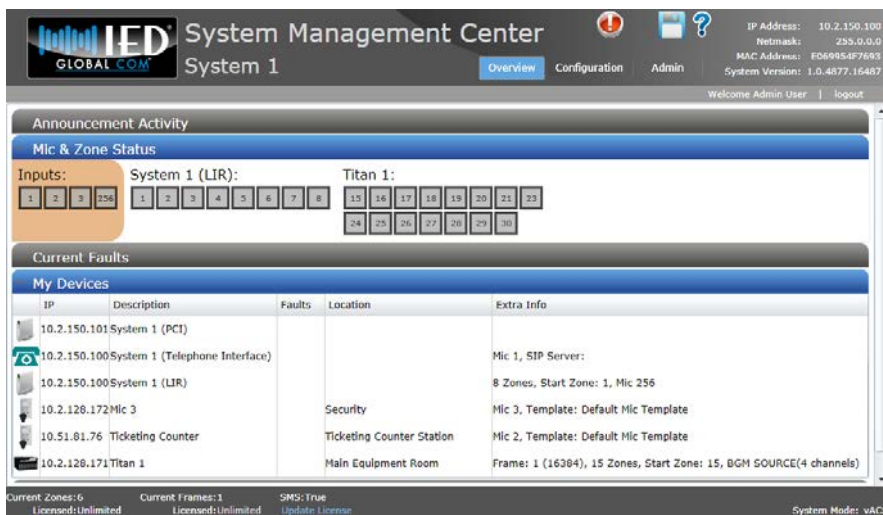1100MSG or 1200MSG

Ethernet

Optional Lifeline 1100ACS

ENHANCING SAFETY THROUGH COMMUNICATION

GLOBALCOM System Architecture

Edge

Digital Microphone Stations

External Devices (Fire Alarm, Security, etc.)

1516LI - Programmable Input Devices

Edge Switch

Client Computers

Core

1200ACS - Announcement Control System

Interface to Other IED Systems

510/520ACS

Local Keyboard and Monitor

External Devices (Fire Alarm, Security, etc.)

Telephone Systems
(Analog Lines)

Local Keyboard and Monitor

Core Switch

System Server (Optional)

1100TEL - VoIP Telephone Server

Local Keyboard and Monitor

1200MSG - Message Server
(For Additional Message Capacity)

Edge

Edge Switch

T9160 - Amplifier Frame

T9032 - Ambient Sensor Collector

Visual Paging Display

THE BUILDING IS BEING EVACUATED. PLEASE PROCEED TO THE NEAREST EMERGENCY EXIT!

Ambient Noise Sensors

Zone Loudspeakers

GLOBALCOM Flex-Architecture provides system scaling from a few zones to thousands, with available multi-layered redundancy and even server virtualization.

Network-Centric Optimized Software
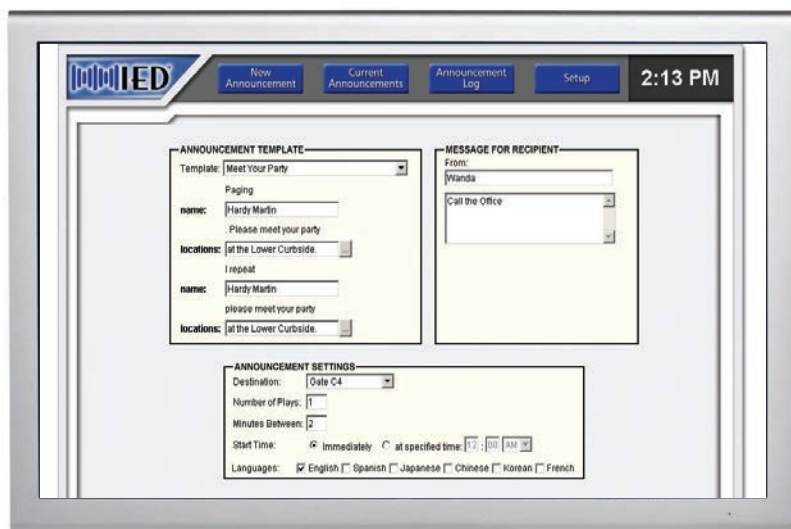

1000vACS

The Virtual Announcement Control System software application contains all the intelligence to manage an entire system of digital microphone stations, digital power amplifiers, digital message servers, and other network peripherals. It operates on the 1100/1200 hardware platforms or commercial off-the-shelf servers.

System Management Center

The System Management Center application is the primary control interface used to configure and monitor the System Management Center software. It is accessible using a standard web browser and is password protected for security.

IED Director

IED Director is a management application that provides a comprehensive application specific interface to your IED GLOBALCOM system. The software provides an easily accessible view of your overall system status and makes system operation very easy through an intuitive and fully customizable graphical user interface. IED Director is the ideal addition to your GLOBALCOM system for system management in complex facilities such as large airports, public transportation systems, industrial campuses or retail centers.

Text-to-Speech Courtesy Announcement System (T-CAS)

T-CAS is a client/server web application that manages the creation and delivery of courtesy and other ad-hoc messages. Messages are created through the web interface and either recorded from a microphone station or generated using the text-to-speech engine. The message can play multiple times and appear on bulletin board displays located throughout the facility. Each message is stored in a database for easy retrieval by multiple operators.

Scalable Flexible Software

THE BUILDING IS BEING EVACUATED. PLEASE PROCEED TO THE NEAREST EM...

EVACUATE THE BUILDING THIS WAY!

Visual Information System (VIS)

IED is leading the way for integrated auditory and visual paging systems for all-encompassing paging and message delivery. VIS works with the 1000vACS and 510/520ACS to automatically deliver fully synchronized visual text messages to visual display devices such as LCD flat panel displays or LED signs. When not actively used for a visual announcement, displays can be programmed to showcase a variety of content such as public service announcements or advertising. Adding VIS to a system assists facilities in compliance with the Americans with Disabilities Act (ADA) by providing a system with the highest degree of message comprehension.

Specialty Applications

Optional additions to provide market-specific announcement needs to the announcement control system.

Flight Announcement System (FAS)

For the airport market, the FAS is used to automate the flight messages in airports to free up gate agents and allow them to better serve passengers. Full support is also included for direct interfaces to MUFIDS, GIDS, BIDS and RIDS systems.

Transit Announcement System (TAS)

For the transit market, the TAS is used to automate the messages in each station while managed from the central command center. Interfaces to train arrival systems allow automatic playback of train arrival, departure, delay, or other messages.
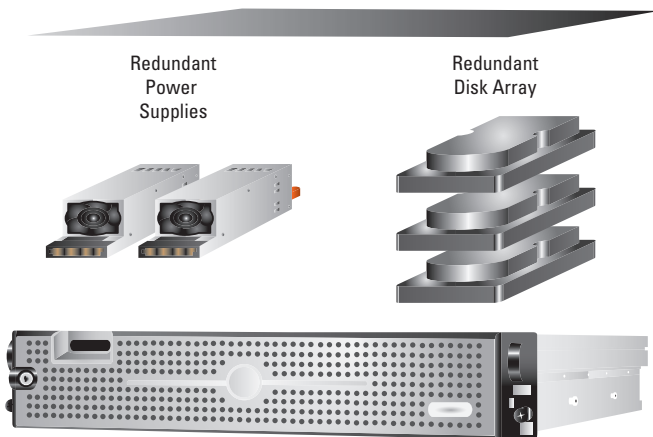
Other Market Specific Software Options

IED has the capability to provide customized software solutions to meet specific application requirements. Contact factory sales personnel to discuss specific system needs.

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Reliable

To ensure system availability, a powerful supervision system is continuously testing the entire system from paging station to loudspeakers. Any abnormalities are logged into the fault reporting system for appropriate action. While basic supervision is sufficient for a simple system, more complex mission-critical systems require a higher degree of reliability. GLOBALCOM and Titan series hardware provide multiple levels of redundancy to allow uninterrupted system operation.
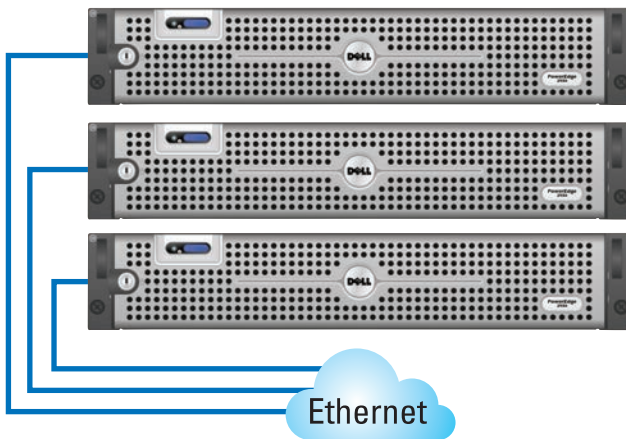
RAID Server

Redundant Power Supplies

Redundant Disk Array

Server Farm

Ethernet

Primary Announcement Controllers

1100ACS or 1200ACS

Ethernet

1100ACS or 1200ACS
LifeLine Announcement Controller

RAID Servers
In systems that utilize the 1000vACS virtual controller in a server environment, redundant RAID server configurations can be implemented. RAID 1 configurations will ensure that all data on the internal storage drive is mirrored, thus allowing the system to continue operating if a drive fails. A RAID 5 configuration adds additional drive redundancy along with a backup power supply. For ultimate server redundancy, third party applications can be used that operate a complete backup server computer.

Virtualization
Modern IT environments often utilize server virtualization in order to make the best use of today's high-end server hardware and consolidated data centers. The 1000vACS also runs on a virtual server that is readily restored in the IT environment.
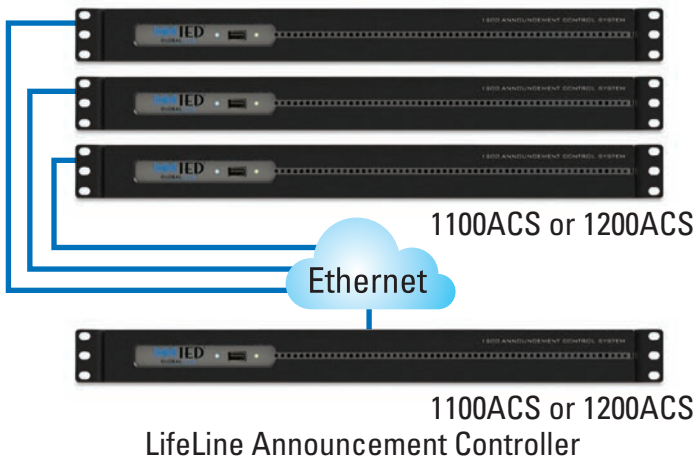
Lifeline ACS
For the most mission-critical systems, redundant announcement controllers operate as backups to any announcement controller in the system using the Lifeline ACS option.

Backup Amplifier Switching
Amplifier cards are continuously monitored for proper operation. In the event of a failure, a backup amplifier can automatically switch and assume the load of the loudspeaker line. This ensures that all loudspeaker lines will be fully functional.

Fault Logging and Notifications
The IED Fault Logger application is bundled with the Enterprise software suite to provide a centralized database to record any faults that may be detected by the supervision system. The application can be configured to automatically notify maintenance personnel when critical system faults are detected.

Hardware and Software

1100ACS-32, 1200ACS-32, 1100DCI, and 1100TEL

1200ACS-32 and 1200MSG

1112PS and 1112PSM

All core GLOBALCOM hardware components utilize a single rack unit chassis to minimize the amount of rack space required for a system.

Software License Options
1000vACS-32 - vACS Software for up to 32 zones
1000vACS-64 - vACS Software for up to 64 zones
1000vACS-128 - vACS Software for up to 128 zones
1000vACS-MAX - vACS Software with unlimited zones
1010vACS-64 - Upgrade from 32 to 64 zones
1010vACS-128 - Upgrade from 32 to 128 zones
1010vACS-MAX - Upgrade from 32 to unlimited zones
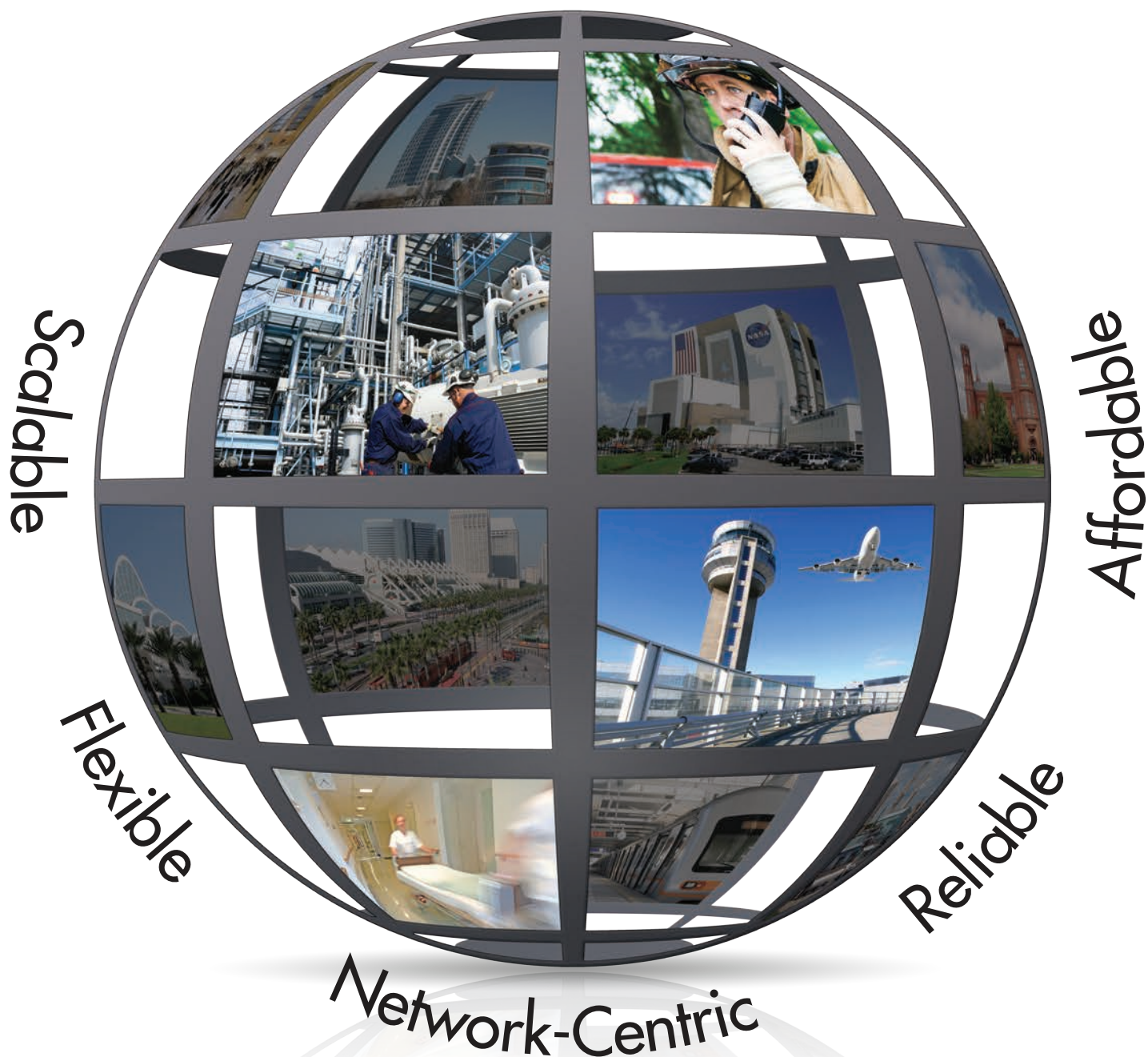**1000vACS-LL -** Addition of Lifeline ACS software to system

Hardware
1100ACS-32 - Announcement Control System with integrated messaging and 32-zone license
1200ACS-32 - Announcement Control System with messaging, telephone interface, 8 logic inputs, 8 relay outputs, and 32-zone license
1100MSG - 8-channel message server for capacity expansion or use with server-based 1000vACS
1200MSG - Enhanced 8-channel message server with telephone interface, 8 logic inputs, and 8 relay outputs
1100DCI - Device control interface
1112PS - 37A, 12V DC rack mount power supply unit with redundancy option
1100TEL - Telephone interface server with capacity for 8 VoIP lines

Accessories
1112PSM - Redundant power supply module for 1112PS
1112PSD - 4 Amp 12V DC modular power supply for single GLOBALCOM devices
1502AI - SmartLink InX2 Audio Input Module, 2 channels
1502AO - SmartLink OutX2 Audio Output Module, 2 channels
DNA78xx - 4Channel Amplifier
1522LR - Logic / Relay Module
1544BAS - 4CH Backup Amplifier Switch
1516LI / 1516LI-8 - Programmable Input Device
1581NA - Single-channel Network Amplifier (Dante or CobraNet)
1542NA - Dual-channel Network Amplifier (Dante or CobraNet)

Scalable

Affordable

Flexible

Reliable

Network-Centric

To Learn More Please Visit www.iedaudio.com or Call (800) 663-2511

IED and the Mitek Electronics and Communications Group practice lean manufacturing and green engineering. In an effort toward sustainability and resource preservation, Mitek's family of brands and their partners have focused on environmentally conscience behavior to reduce waste, recycle, and actively decrease its global impact. These endeavors include paperless business operations, utilization of recyclable materials, limiting consumption, responsible product design and production, and much more.

GLOBALCOM is designed and engineered to meet these eco-friendly goals. By utilizing fewer components and maximizing system efficiency, GLOBALCOM reduces energy/resource waste from manufacturing and transportation to operation and repair.