

IAM-5 Version 4.2



If you're responsible for a multiple vendor and component telecommunications network spanning multiple facilities and locations, the IAM-5 can help you.

Benefits of Consolidating Your Alarm Monitoring on the IAM-5:

- Absolutely knowing the status of your network and providing notifications to the right people to keep your network running.
- Consolidated alarm management platform monitors as a master station or mediates alarms to your existing master or MOM.
- Widely deployed, well-established monitoring platform that is 100% guaranteed to work for you.
- Advanced monitoring features developed from our clients' requests address your real-world operational needs.
- You get the support you need to quickly turn up and maintain your monitoring network.
- Smooth migration to advanced monitoring capabilities, building on your investment in legacy remotes.

Overview

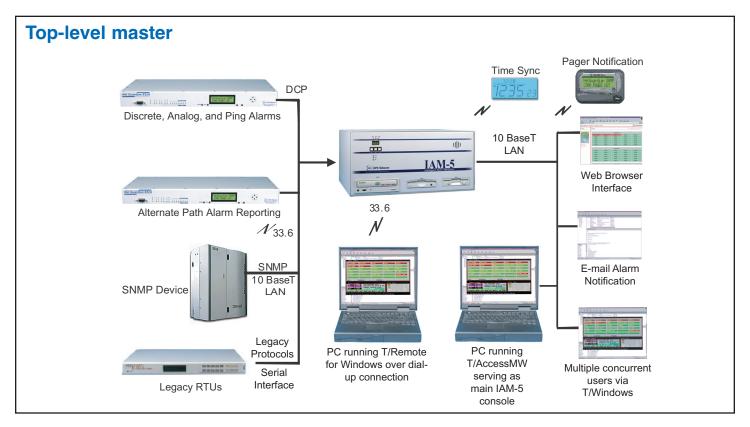
The Intelligent Alarm Mediator (IAM-5) is a multiprotocol, multifunction network alarm manager designed as a single-plat-form solution for all alarm monitoring applications. The IAM-5 collects alarm data from a wide variety of equipment, regardless of manufacturer or protocol, and displays the state of your entire network in one interface, eliminating the need for specialized terminals. With this one unit, you can:

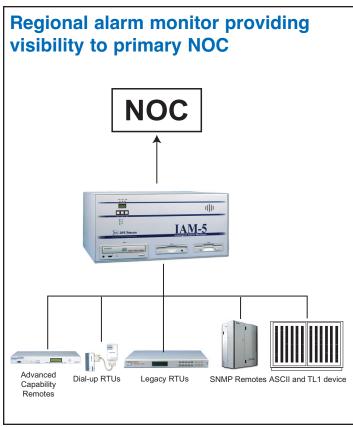
- Monitor 24 channels of alarm data in any current or legacy industry protocol (ASCII, Badger, Datalok, DCPX, DCPF, DCM, Larse, SNMP, TABS, Teltrac, TL1, TRIP, and others).
- Map alarm data to a single, consistent interface that displays up-to-the-minute information on your entire network.
- Display network status and alarm information to multiple users connected via LAN, dial-up, or serial port.
- Administer a centralized database of configuration information for your whole network.
- Automatically send detailed notifications and instructions to repair and security personnel when an alarm event occurs.
- Control remote site equipment either manually or automatically using derived alarm formulas processing data from several alarm sensors.
- Mediate alarm data to different protocols.
- Forward alarm data to other network management devices
- Maintain logs and create reports of alarm events.

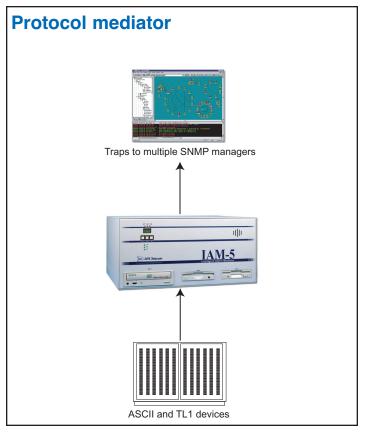
The capability and diversity of the IAM-5 has made it the industry standard in telecommunications, utilities, cellular communications, and transportation.

Because of its comprehensive functionality, the IAM-5 can be used for a variety of network monitoring applications.

Here are some of the ways our clients have successfully used the IAM-5:







Standard Features

Upgrade your monitoring and retain your investment in legacy remotes

You may be one of the many network managers who feel they are locked into an obsolete legacy alarm monitoring system. You know you urgently need to upgrade your polling master and acquire modern alarm management capabilities, but the cost of replacing your entire monitoring network, including remote units, is simply too great.

If that's your situation, you can rest easy with the IAM-5; it's the no-risk way to upgrade your network to a modern alarm monitoring system. The multiprotocol polling capacities of the IAM-5 support many different types of remote unit, even ones not manufactured by DPS Telecom, and even remotes no longer supported by the manufacturer. The IAM-5 can poll remotes by Badger, Dantel, Granger, Larse, NEC, and Pulsecom.



The IAM-5 fully supports legacy remotes from Larse, Pulsecom, NEC, and Badger—even when the original manufacturer has dropped them.

The low-cost path to adding advanced remotes

Whether you want to create an entirely new monitoring system or gradually add new RTUs at a pace that's right for your budget, the IAM-5 offers a clear path to adding advanced remote capability. DPS Telecom makes a full range of remote units for the IAM-5, featuring discrete and analog alarms, control relays, built-in remote visibility through a Web browser interface, and easy configuration. We build remotes for small, medium, and large sites, for LAN, dial-up, and dedicated connections. Remotes like the NetGuardian, the KDA series, the DPM series, the AlphaMax, and the MAS series have won the respect of the industry for their capability and reliability.



Advanced remotes like the NetGuardian 832A easily integrate into your existing network, even working alongside your legacy remotes.

An easy-to-use interface ensures rapid and accurate response to network threats

The IAM-5's customizable displays present network events in plain English, in terms that your staff will immediately understand and take action on. The IAM-5 interface is easy to use and ensures that system operators will have the right information to take corrective action in an emergency.

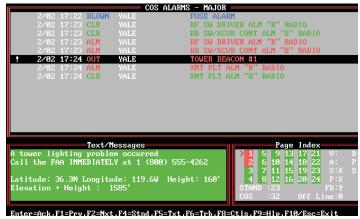
The topmost level of the IAM-5 interface is the Alarm Summary screen, which presents an at-a-glance overview of your entire network. Alarms are not displayed in meaningless lists of devices and points, but in functional categories that make sense to the end user. Each labeled, colored rectangle in the Alarm Summary screen represents an "alarm window," a collection of alarms defined by user-selected criteria, like severity, equipment, or site. If an alarm event occurs, the window for that alarm point starts blinking and changes color to indicate alarm severity.



The Alarm Summary displays the status of your entire network in a single screen. One glance will tell you if all is well or a problem needs attention.

From the Alarm Summary screen the user can select two other alarm screens that present more detailed information.

The Change of State (COS) screen provides immediate notification of new events in your network. The COS screen displays alarm points that have changed state from Normal to Alarm, or vice versa. You don't have to hunt to find out what has changed in your network-the COS screen lists it for you. COS alarms stay in place until acknowledged by a system operator.



The COS screen displays a continually updated list of new events in your network.

The Standing Alarms screen displays currently failed alarms. The Standing Alarms list is continually updated to reflect the state of the network, giving you an easily accessible list of all current

threats to network integrity. Even if the system operator acknowledges the alarm, it remains in the Standing Alarms screen until it is cleared.

Diagnose communication problems

The IAM-5's monitoring functions includes integrated tools for examining communications traffic. You can monitor polling to remotes, take devices online or offline, and analyze communications in ASCII, hexadecimal, or even plain English directly from any monitoring screen. You can manage communications with your remotes without bulky additional equipment, and alarm monitoring continues uninterrupted.

		— Site Statisti		81(DAT1	10A)			
Address	Device	Site Name	Polls	Good	Bad	Status		
27	STD	KENNEDY ES	2	2	0	ACTIVE		
38	STD	BLDG 3/14A	2	2	0	ACTIVE		
39	STD STD	BLDG 3/14B BLDG 3/14C	2	2	0 0	ACTIVE ACTIVE		
40 73	STD	GODDARD 1	1	1	ñ	ACTIVE		
								ı
								ı
	9;+	e Statistics						
	311	e statistics			> 1		V: D	1
					2		A: P	
					3		S: S	
					STANE			
					COS	:6	Off Line:0 4492303	'n
F1/AF2=Tni	t Stats.F	2=Poll,F3=Cfg,F4=	Online.	F5=0ff1	line.F8	=Lock.F		Z

Convenient features like this device status let you manage your remote devices while still monitoring your network.

Integrated alarm monitoring saves time, trouble, and money

Analog alarms, discrete alarms, environmental alarms, pings, and security alarms, are presented in the same display. All alarm data, regardless of source and type, can be used as input for the IAM-5's automatic notification and derived alarm features.

This level of integration is more than a convenience. It saves time and trouble, because your monitoring staff doesn't have to search for critical information. And, because you don't need special single-application terminals to monitor different alarms, the IAM-5 will also save you the cost of buying extra equipment.

	4 400 45 404		ING ALARMS - MAJOR
	1/30 17:01 A		
	2/02 16:43 A		RX B DEMODULATOR
	2/02 16:54 A		RX A DOWNCONVERTER
	2/02 16:54 0 2/02 17:22 A		TOWER BEACON #1 RCV PLT ALM "B" RADIO
#	2/02 17:22 A		RX B DIGITAL DEMUX
*	2/02 17:23 A		RF SW DRIVER ALM "B" RADIO
	2/02 17:23 A		BB SW/XCUR CONT ALM "B" RADIO
	2 02 11 · 2J H	ATTECH ATTECH	DD OW NOVI OVIII HAIT D HEDTO
D4 · 2		Trouble Log	
	2:100:1:2	1 of 1 2/2/	/95 16:41 DPS > 1 5 9 13 17 21 U:
Sent	2:100:1:2 t Joe to the s		/95 16:41 DPS > 1 5 9 13 17 21 U:
Sent	2:100:1:2 t Joe to the s office first	1 of 1 2/2/ tite, he has to	/95 16:41 DPS > 1 5 9 13 17 21 U:
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Sent the	2:100:1:2 t Joe to the s office first	1 of 1 2/2/ tite, he has to	/95 16:41 DPS

Analog, discrete, and equipment alarms are integrated into the same display.

Everyone knows what to do in case of an alarm

The COS and Standing Alarms screens feature Text Message windows that provide the user with additional information about each alarm. The Text Message window can display an explanation of the alarm or specific instructions for appropriate action. System operators, even without extra training, will know precisely what to do and who to call in case of an alarm.

```
Text/Messages
A tower lighting problem has occurred.
Call the FAA IMMEDIATELY at 1–800–555–4262.
Latitude: 36.3N Longitude: 119.6W Height 160'
Elevation + Height: 1585'
```

Text messages let you give specific instructions to your monitoring staff, so you can know for certain that correct procedures are followed.

A Trouble Log window is also accessible for each alarm from the COS or Standing Alarm screen. This convenient feature allows system operators to record what corrective action was taken for each alarm, keeping clear documentation of what has been done and eliminates guesswork after shift changes.



The Trouble Log clearly records corrective actions, so you'll never have to guess if a problem has been fixed.

History maintained for future analysis

Alarm information is an invaluable source of data about your network. The IAM-5 can record up to 999,999 system events, including alarms, control operations, alarm acknowledgements, internal alarms, and user activity. History reports can be generated for points, sites, and alarm windows in a variety of formats, including delimited text that can be imported to a database or spreadsheet for further analysis.

Automatic notifications ensure instant, effective response to alarms (scheduling and escalation)

IAM-5 automates the detail work of alarm notification, saving time and reducing your dependence on NOC staff. The IAM-5 can automatically page repair technicians and security personnel if an alarm occurs. The paging function includes full support for alphanumeric paging, so you can automatically send detailed notifications and instructions to alphanumeric pagers, cell phones, and PDAs.

And the IAM-5's automatic escalation feature will make sure the page is acknowledged. If the first technician paged does not acknowledge the alarm within a user-specified time, a backup technician will be paged. If neither technician responds, a supervisor will be called. You don't have to worry that alarms are piling up unnoticed. The IAM-5 can also send automatic e-mails to specified personnel when an alarm event occurs. This is a great way to keep senior supervisors informed of alarm events, and also creates an automatic record of alarms.





Automatic notification by pager or e-mail makes sure vital information gets to the people who need it fast.

Nuisance alarm filtering saves operational time and focuses efforts on serious emergencies

The IAM-5 has many features to reduce or eliminate nuisance alarms, ensuring staff response to serious network threats. Unimportant alarms can be set to not appear in display screens—you can still send the alarm to a history file for recording and later analysis. For problems that are usually self-correcting, such as power failures and fades, you can set alarm qualification times that declare an alarm only if the alarm stays failed over a period of time. If an alarm oscillates between Normal and Alarm, creating a lot of alarm activity, you can silence the alarm for a specified time period.

Correlate alarms to defend your network against complex threats

Some alarm events aren't important when they occur in isolation, but are dangerous threats when they happen in conjunction. For example, neither a generator failure nor a low backup battery may be a critical alarm by itself, but it is a critical situation if both happen simultaneously, especially during times of peak network activity.

The IAM-5 provides visibility of these complex network threats with derived alarms. A derived alarm is a custom alarm based on a logical formula which processes information from different alarm sensors. Derived alarm formulas can include date and time statements and input from dozens of alarms, keeping you fully informed of the true state of your network.

Correct problems instantly without expensive windshield time

With the IAM-5 you'll never need to travel miles to a remote site just to turn a switch. The IAM-5 provides full support for remote control relays, including controls connected to legacy RTUs. Controls are accessed directly from the alarm display screens, and are clearly labeled in plain English, so your monitoring staff can always respond quickly and accurately to alarm events.

The IAM-5 will even operate remote site controls without any human intervention at all. Derived controls, which are similar to derived alarms, automatically issue control commands in response to alarm inputs. Derived control formulas accept all the same inputs as derived alarm formulas, allowing you to automate extremely complex and intelligent responses to emergencies.

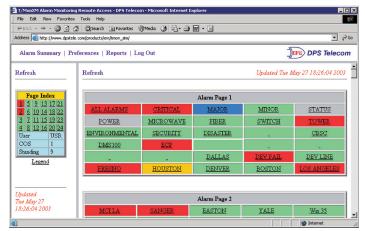
Derived controls can correct failures before any human operator even knows something is wrong, giving you a tireless first line of defense against network failures.

Monitor from anywhere in your network

The IAM-5 supports concurrent multiple user access over dedicated line, dial-up, and LAN/WAN connections. The system acts as a central server of alarm monitoring services, allowing you full access to all of the IAM-5's functions from anywhere in your network. Because network monitoring isn't tied to one console in the NOC, supervisors have instant access to the system straight from their desktops, and it's easy to rotate monitoring staff at different locations.

Several client applications are available for remote access to the IAM-5. T/Windows gives fast LAN access for multiple users. A Web browser interface allows cross-platform access to the IAM-5 from any computer connected to the Internet.

And system security for multiple users is guaranteed. The system administrator can create a individual security profile for each user, allowing precise control of user access. For each user you can limit what alarms may be viewed, which alarms may be acknowledged, which controls and system commands may be issued, and what modifications may be made to the system configuration.



The Web Browser interface lets users view and acknowledge alarms via the Internet—just one of the remote access options for the IAM-5.

Precision time synchronization

History logs and alarm reports require accurate timekeeping. To ensure that these time-based functions work correctly, the IAM-5's internal clock can be synchronized automatically by Internet time servers.

Maintain alarm collection when communications links are down

The IAM-5 supports two kinds of backup connection to your remotes, giving you visibility during communication breaks.

Alternate path routing provides multiple communication channels between the IAM-5 and the KDA-864 and NetGuardian remotes. If the network goes down, both the IAM-5 and the remotes will automatically maintain communication via dial-up connection.

Ring polling monitors network links between DCP remotes that are daisy-chained in a ring configuration. This allows precise location of network breaks and continued full visibility, even during a break.

Easy configuration ensures quick implementation

The IAM-5's configuration database editor is easy to understand and use. Convenient features like device templates let you create a standardized site configuration that can be applied to your entire network, greatly reducing implementation times. As your network grows, it's simple to add new sites, new devices, and new monitoring capabilities to the IAM-5's configuration. And database reports verify that the IAM-5 is monitoring your entire network.

The configuration database can be backed up either on removable media or on another computer in your network via FTP. Database restoration is just as easy. If disaster strikes your unit, or you simply want to move up to a newer model, your configuration information can be quickly transferred to a new IAM-5.

Of course, there's always an easier way—have DPS Telecom configure your IAM-5 for you. Our turn-up on-site assistance team will help install and configure your system and train your staff to use it. It's the quickest and best way to get your network monitoring up and running.

High reliability keeps your network secure

From the physical design of the unit itself to the technical support behind it, everything about the IAM-5 is designed for maximum reliability.

The IAM-5 is a durable rack-mount unit designed for full compatibility with telco environments. The IAM-5 will operate efficiently under extremes of temperature, humidity, vibration, and airborne contamination, and it will not create electromagnetic interference in telecommunications equipment. The dual –48 VDC power inputs are compatible with telco power supplies and allow a secondary backup battery to run the IAM-5 if a power outage occurs.

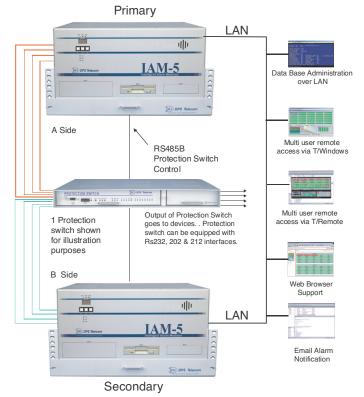
The IAM-5 is backed by a two-year hardware warranty. And if you have any problems with your unit, you can count on DPS Telecom Technical Support, rated by our clients as the best in the industry. Our courteous Technical Support staff maintain a fully-equipped simulation laboratory in which they can connect to your IAM-5 via modem, simulate your problem and quickly isolate the cause. Emergency assistance is available 24 hours a day, seven days a week.

And if you want the best possible protection for your IAM-5, you need the T/Mon Gold Plan. The T/Mon Gold Plan guarantees that if anything goes wrong with your IAM-5, we will repair it or replace it within three business days. Plus you'll get priority technical support, free software upgrades, annual free training for your staff, and an opportunity to purchase a new IAM-5 for 50% off after three years. The T/Mon Gold Plan ensures that your network monitoring is never offline.

Optional Configurations

Safeguard your monitoring with backup systems

When two or more IAM-5s are used in a network, one unit can be assigned to be a secondary backup. Routers serving as protection switches are connected between the IAM-5s and reporting devices. If a router detects that the primary system is down, it will immediately switch all monitoring activity to the secondary system. The databases of the two systems are synchronized via a serial connection. For even greater security, the secondary IAM-5 can be placed at a different location to create a LAN-based geodiversity contingency backup.



A standby IAM-5 means your network will be protected under even the most challenging circumstances.

Monitor SNMP devices and forward SNMP traps

The IAM-5's integrated SNMP agent can report to up to eight SNMP managers. This is great for sending traps to redundant masters, or sending specific trap types to different masters.

The SNMP Trap Processor software module enables the IAM-5 to receive traps from SNMP devices. This offers great advantages over a conventional SNMP manager, because the IAM-5 can apply all its powerful alarm processing features to SNMP traps just as if they were conventional alarms.

Alarm visibility of ASCII devices

The ASCII Processor software module makes it possible for the IAM-5 to receive information from PBXs, routers, switches, and any other device that transmits ASCII text, providing remote visibility and control of a wide range of equipment. ASCII output is converted to IAM-5 format through parsing rules that can be created and modified as needed.

Create a graphic display of your network

T/GrafX software uses maps, icons, and photos to create a graphic display of your entire network. The top-level view gives at-a-glance network status. Multilayer graphics let you zoom down to device level to view specific alarm information. And because T/GrafX can run on any Windows-based PC, the benefit of an advanced graphics display can be easily added to your IAM-5 monitoring network.



T/GrafX is a NOC war-room display right on your desktop.

Control personnel access and protect security at your remote sites

The Building Access System is a comprehensive building management system that gives you complete control over who can enter your remote sites, and when they can do so. With the BAS you can maintain a list of who shall be granted access to sites and set specific permissions for personnel, dates, times, and even individual doors. The Building Access System eliminates the expense and security risk of keys. The BAS also acts as a security alarm system, reporting unauthorized entries direct to the IAM-5.

Specifications

Dimensions: $17'' \times 8^{1}/8'' \times 14''$

(43.2 cm x 20.6 cm x 35.6 cm)

Dimensions with Slide Rack: 17" x 10" x 14"

(43.2 cm x 25.4 cm x 35.6 cm)

Mounting: 19" or 23" rack
Power input: -48VDC

Fuse: Two 2-Amp GMT fuses **Operating Temperature:** 32° to 95° F (0° to 36° C) **Operating Humidity:** 0% to 95% (non-condensing) **Modem:** 33.6K Baud Internal ISA – RJ11

LAN Interface: 10/100 BaseT **COM Ports:** Up to 24 ports

(6 four-port controllers)

Processor: AMD 550 MHz

Hard Drive: Quantum 20GB (5400 RPM)

Memory: 64MB

(two slots, both occupied)

Slots: 5 ISA 2 PCI

1 Shared PCI/ISA

Relays: 4 visual, 4 audible, 1 watchdog

Fans: 3 external, 2 internal
Removable Storage: 1.44 floppy disk drive
Optional Storage: Zip drive, CD drive

Hardware Warranty: 2 years

CE Certified Specifications:

Hard Drive: Quantum 4.3GB (5400 RPM)

Fans: 3 external

2 internal (with filters)

Processor: AMD 450 MHz



The IAM-5 back panel features multiple Intelligent Controller Ports, two communication ports, an audio/visual relay port, a fuse alarm port, a POTS line jack, a parallel printer port, a LAN connection port, two fuse inputs, and a power block.

Five No-Risk Steps to Best-in-Class Monitoring



Bob Berry CEO, DPS Telecom Creator of DPS' No-Risk Guarantee

You're never taking any risks when you purchase DPS Telecom products. We built our business by following a client-first philosophy, and our primary goal is creating the highest level of security for your network.

Every IAM-5 system we make is customized for the specific needs of the client who orders it. Our client consultation process guarantees that you'll get the complete monitoring coverage your network needs, without paying for costly and unnecessary extras.

If your network has unique needs, we'll create a custom design system just for you. At DPS Telecom, custom design is a standard service. Our business has been built on continuous innovation, and we embrace opportunities to design new network monitoring solutions.

All our products, including custom solutions, are backed by our **30-day no-risk guarantee**. Here's how the DPS Telecom custom design process works:

- We start by listening to you. The first step in the process is an interview between the client and a DPS Telecom Sales Engineer. Our sales staff has the technical knowledge to understand your monitoring needs and to identify how we can create the right solution for you.
- The next step is a Needs Analysis, a complete audit of your network's sites, alarms, and monitoring tasks. We also take an important extra step. We analyze your current network monitoring to determine how we can integrate your existing alarm monitoring equipment into a robust, modern network monitoring system. Our goal is to leave the smallest possible footprint on your operations and expenses while securing your network with the highest level of visibility.
- We then tailor a network monitoring solution based on our research of your needs. If an existing DPS Telecom solution meets your needs, we'll submit a proposal detailing the equipment, configuration, and application we recommend. If you need a custom solution, our engineers will create a system suited to your network's individual needs.
- At installation, we provide on-site turn-up assistance and training to familiarize your staff with all aspects of your DPS monitoring solution.
- The final step is testing the proposed solution at your site under real-world conditions for 30 days. Our top-rated technical support engineers will be with you every step of the way to ensure a trouble-free implementation. If, at any time during those 30 days, you decide for any reason that our solution will not meet your monitoring needs, you can cancel your order with no further obligation. If the proposed solution meets with your approval, we will immediately fill your order for as many units as you require.

Our support doesn't stop with the sale. We offer many additional services to help you get the most from your network monitoring, including training for your staff, off-site databasing, installation assistance, the T/Mon Gold Plan maintenance agreement, and our top-rated technical support. We will never leave you with a monitoring problem unsolved. At DPS Telecom, we see ourselves as your partner in monitoring your network securely and effectively. We always put the client's needs first.

Here's what our clients say about DPS Telecom's products, service and support:

"Other vendors received the same information to respond to and I can say DPS was the only one to reply with a cost-effective solution."

— Bob Herlihy, Bell Atlantic Global Networks, Inc.

"We have used DPS products for nearly 15 years. DPS Personnel have always provided the highest level of service that can be expected. I feel much of the success you as a company have achieved can be attributed to your people and what appears to be a customer-first philosophy."

— Glen Lippincott, Southern Company

"I was given the task of coordinating the upgrade of all of XO's IAM-5 installations. During the upgrade project, whenever we needed help, the DPS technical staff quickly analyzed the situation and provided an effective solution. DPS's technical support staff is a refreshing change in an industry where customer service is declining."

— Jerrid Hamann, XO Communications



Call your DPS Sales Representative today. 1-800-622-3314