

Commercial **INTEGRATOR** EXPERT SERIES



**IP ENDPOINTS:
10 FEATURES ON
INTEGRATORS'
WISH LIST**



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Demand for IP endpoints now extends far beyond the mass notification market. As a result, integrators and customers now demand much more from these IP enabled solutions.

The concept of an IP endpoint that sits wherever it's needed acting as a portal for mass notification and emergency communication is invaluable. Think about it. Being able to quickly access a device that can call for help or raise an alarm — whether you're in a classroom, gymnasium, reception desk or wherever — is a critical safety measure in today's world.

However, it wasn't that long ago that these IP endpoints weren't readily available. For many security and AV integration firms, their first opportunity to seize these benefits for their customers came over a decade ago when AtlasIED released its first series of IP endpoints. These included a conference

Today's IP endpoints address myriad needs for customers and system designers. Shown is AtlasIED's IPX series of IP enabled solutions.

(or desk) phone with a much louder speaker and were utilized in areas where this sort of phone normally didn't go.

However, needs change and evolve. IP endpoint solutions had to be improved to reflect modern integrators' wish list of features to help them keep pace with their customers' requirements.

In late 2018, AtlasIED released its new IPX series of IP enabled solutions, which vastly improved on the legacy system thanks to an update of all the electronics including integrating a better motherboard, control board and adding a high-definition LCD screen. An LED flasher allows the LCD screen to scroll and flash text, acting as a visual aid to further alert that something is being communicated. That could be important at a school where there might be a class with someone who is hearing impaired, or in specialized rooms like band or orchestra spaces, where hearing the emergency announcement could be challenging.

Alex Puorro, vice president of IP Endpoint Development at AtlasIED, says, "with the IPX series it was important to evolve IP endpoint category while preserving the foundational features established in previous models -- while adding beneficial enhancements of modern styling and an upgraded high-resolution visual display."

Indeed, the evolution of the IP endpoint category seems to coincide with the needs that integrators recognize within their customer bases. Let's take a closer look at integrators' wish list when it comes to IP endpoints:

High Definition Screen

It's noteworthy that AtlasIED added a high-definition screen with its updated IPX Series. Why is that valuable for integrators? "The high-definition screen allows for more information to be displayed in the classroom than is possible with a traditional LED display," explains Justin McBee, Audio Visual Sales Engineer, Logicalis, Inc.

"For example, think about notifying the classroom of a fire. With a traditional LED display, you are limited to displaying text and possibly flashing it. With the high-definition display, the screen can flash while simultaneously scrolling text can provide evacuation information. This is a much better way to grab the attention of the people in the room and give them clear and concise information on what they need to do."



IP Endpoint Flasher and ADA Compliance

"Along the lines of grabbing people's attention, adding a flasher to an IP endpoint such as a speaker is critical because it will allow hearing impaired individuals to see when an important audio notification is being sent," McBee says.

"The color of the flasher can distinguish what kind of announcement is being made, which gives the individual insight on what steps they need to take. Flashing red can signify a fire alarm, and that they need to follow the fire evacuation plan. Blue could signify a lockdown, and so on," he says.

"When you couple the flasher with the high-definition display and additional information, the individual or individuals get a much better understanding of what the notification is and what steps to take next."

Education-Focused Emergency Communication

With AtlastIED's Globalcom.edu mission critical mass communication platform, an entire school's paging, audio, video, digital signage and emergency systems can communicate together under one solution—even off-campus and district-wide.

Let's say there's an emergency in a classroom setting. A teacher may have a button under his or her desk or hidden in the room that is wired to the speaker's contact closure, so it's simple to initiate a call to the principal or safety officer and alert them to what's going on.

IP endpoints can play a mission-critical role in a fast-moving health care environment providing quick and efficient two-way communication.

McBee says Logicalis, Inc. is starting to get a lot of requests for these in the front office of schools, too. "Having a hidden button allows a staff member to notify security or other staff when there is a disruption in the room, without letting the individual causing the issue know that additional help has been requested," he says. "For example, say an upset parent is at a school. The last thing you want to do in that situation is pick up a phone to ask for someone to come assist with diffusing it. That would just add to the tension."

So it's not just for critical, life-saving alerts – but at the same time it's very much for those applications. "Another thing that Logicalis has been doing with panic button installs is tying into the access control system at the facility," McBee explains. "Pressing the panic button not only calls for help discreetly, it also will lock down the campus to keep the individual from accessing any of the classrooms if they decided to try."

Meanwhile, among its services, Ford Audio-Video Systems, LLC champions digital signage to coordinate with emergency messages, helping to inform people about active shooters, weather emergencies, campus violence or fire. Now, when something happens, the emergency protocol kicks in and the proper people are notified by speaker, digital signs and even emergency text and email. Its solution also allows voice announcements to be changed based on the type of incident, time of day, weather and other emergency conditions.

Speaker Quality

In AtlasIED's case the updated system utilizes a new speaker that replaces the legacy model's paper cone driver, which wasn't super intelligible at high decibel levels. The new coax speaker is clearer and much better received by those in the education market.

"IP speakers with a quality coaxial driver produce a more intelligible announcement," McBee says. "There is nothing worse than making an announcement that can't be understood. When everyone can understand the announcement, they can take the appropriate steps in a much shorter amount of time. Teachers should not have to waste precious time calling the front office to confirm what they heard when they should be exiting the building because of a fire or locking doors because of an unknown person roaming the campus."



Mics Matter

Having a microphone on the endpoint is important for multiple reasons. "It enables hands-free operation for a classroom," McBee says. "When a call switch is connected to an IP endpoint, it allows the user to simply press the call switch and go back to dealing with the situation in the room, while talking freely to the recipient of the call that was placed. If you had a situation where you had to perform CPR on someone, you couldn't do that and hold a phone at the same time."

Software Interoperability

What's also nice about the IPX series of IP enabled solutions is the software that can be used. While the company makes its own software, the system has the ability to work with third-party software and work with Cisco, Singlewire on the product InformaCast, and also Synapse.

Being able to work across multiple mass notification platforms is very important, according to McBee. He describes a Logicalis customer with IP endpoints across multiple campuses and that some have older IP speakers that only work with a single mass notification software. "The platform they are currently on is being phased out for a newer version, so we are taking the opportunity to look at several platforms to make sure they have the best solution for their needs," he explains.

The new AtlasIED IPX Series offers high definition displays.

"If we move away from their current mass notification software, all the older IP speakers will need to be replaced at quite a cost to the customer. This must be taken into account and may force the customer to stick with their existing software even though something else may be a better fit."

AtlasIED's IP endpoints work across all platforms and all the different software manufacturers which eliminates this problem.

"Most of the software that we work with and that we've tested on and that we have a relationship with, you plug our speaker into a Cat 5 cable over PoE or PoE+, and it immediately auto registers to the software," Puorro says. "I've seen it first-hand working with Singlewire, working with Synapse, working with our own software. From the time it takes to drill in an enclosure of ours and put the speaker up, hook it up to a Cat 5, by the time you walk back to your computer, look at the software, it's up there, it's ready to go. You just have to tell it what you want it to do."

With the click of a Cat 5 cable into the card, it's up and working, and one can be making pages within a few minutes. It's just a matter of putting them into zones and telling these speakers specifically what you want them to do.

Power-over-Ethernet

AtlasIED's new IPX solutions are all PoE or PoE+ powered, even those models with an LCD display. That's significant, McBee says. "Ultimately, it reduces the cost for the customer. PoE makes for a faster installation and removes the need for 120-volt power at each device, or for installing a low voltage power distribution system."

Ease of Installation

Time is money on the job site. As such, integrators would like IP endpoint products to fit in two-by-two ceiling tiles when applicable. "It reduces cost and looks better," McBee says.

The two-by-two speakers blend in better with suspended ceilings and can be installed much faster than a standard round speaker, which has to be cut into a tile."

Applications Beyond Mass Notification

While IP endpoints are historically thought of as a mass notification emergency communication solution – and they are – integration firms are leaning on these solutions for other applications.

Ford Audio-Video Systems, LLC is a company that has taken advantage of AtlasIED's IPX Series beyond mass notification. Yes, the company has integrated the system into projects in schools, but also corporate buildings, hospi-

tals, industrial buildings and mass transit hubs.

Besides education facilities, the AlasIED IPX line supports a variety of applications such as apartment complexes, hotels, or just about any commercial building. use. Consider an open office space environment. The IPX line can increase efficiency on a day-to-day basis. With analog paging there are speakers overhead and they may be able to send messages to a manufacturing warehouse or headquarters — but there's no way to talk back or get any sort of feedback from whoever one reaching out to. The IPX system, however, allows for that two-way communication.

With the IPX speakers around the walls and in the ceilings, when something goes wrong, it only takes a push of a button and you can initiate that full duplex SIP call back to the plant manager and communicate what happened and explain exactly what's going on.

A general page or alert can be used in non-emergency situations. A good example might be issuing an announcement for all employees to gather in the conference room for a company-wide meeting. With analog speakers, this would be one-way communication only, but with the IPX solution there's an opportunity for employees to communicate back over the microphones.

There are also valuable applications in the healthcare market, because the software can work with any nurse call system or patient call system. In a health care environment, quick and efficient two-way communication be the difference between life and death.

Meanwhile, the endpoint speaker can provide health care environmental benefits. Playing background music, for instance, can soothe patients and improve their in-room experiences.

Looks Matter

Granted, aesthetics matter very little in a mass notification application but since integrators are deploying IP endpoints for a variety of reasons, looks can matter. Consider the corporate or office environments. Cosmetic concerns have typically kept this technology out of office or workplace planning, but AtlasIED's IPX endpoints have a modern aesthetic that can easily blend into any decor.

So just as the demand for mass notification emergency communication has evolved over the last decade, so have the priorities around IP endpoints. These 10 factors on AV and security integrators' wish lists have pushed the solutions forward and made them invaluable beyond just emergency applications.