Florence City Schools Returns to In-Person Learning with Eagle Eye Networks and nSide

INDUSTRY
K-12 Education

LOCATION
Florence, Alabama

FEATURED SOLUTIONS
- Eagle Eye Cloud Video Management System (VMS)
- Eagle Eye ST Series Thermal Cameras

RESELLER PARTNER FEEDBACK
"The consensus among the school community is, the technology is impressive. It works, and it works quickly, capturing a body temperature in about 30 milliseconds, which enables entryways to manage a high volume of people, while following federal guidelines."

– Dr. Steven McKinney, Founder and CEO, nSide

Business Challenge

Florence City Schools, ranked in the top 6 percent of school districts in the U.S., was facing the same challenges as other schools around the world during the global COVID-19 pandemic: How do we continue to educate our students, while keeping them, as well as faculty and staff, safe and healthy?

District leaders began researching state and federal funding earmarked to support schools in their efforts to return kids to campuses. Uses for this funding were very limited, with medical devices being one of only four. In April 2020, the U.S. Food and Drug Administration (FDA) came out with a ruling approving the use of tele-thermographic systems as devices to measure body temperatures, under very specific use cases and with extremely strict usage guidelines.

With pressure mounting from their community to re-open, Florence City Schools' leaders sought help from nSide, a school safety platform provider headquartered in their hometown and Eagle Eye Networks Reseller Partner.

"When we started talking about what options existed, the recurring themes were around finding a solution that was minimally invasive, didn't require an increase in staff, and above all, would protect their kids," explains nSide Founder and CEO, Dr. Steven McKinney. "What kept coming to the forefront were non-contact, infrared thermometers and the application of thermal cameras for elevated body temperature screening."

Business Solution

McKinney went to work, closely evaluating all the FDA guidelines for thermal camera usage, and vetting providers. He locked in on Eagle Eye Networks, as it was one of the few that had thoroughly tested its thermal cameras for elevated body

temperature usage. In addition, its system is cloud based, allowing for real-time viewing; can mass screen large numbers of people on a daily basis; and its experts could very honestly educate purchasers on what the system could and could not do.

The team at nSide installed 30 Eagle Eye thermal cameras at 11 locations across Florence City Schools, including school campuses, the Board of Education building, technical resource center, and community learning center. Equally important, nSide thoroughly researched all locations prior to install and created a site plan for each that included crowd control stanchions to narrow entryways and ensure a near single-file flow through the target area, and signage to condition students to look up at the camera and expose their foreheads.

"The site design was everything," says McKinney. "The technology was the easy part; however, designing the entrances so the process minimally impacted the school and staff's day-to-day operations, plus setting realistic expectations, were the more challenging pieces."

With the technology in place, Florence City Schools students returned fully to in-person learning January 2021.

The Nuts and Bolts

Each camera has the ability to identify a human face and then scan that face for a surface temperature. And, each site had a senior faculty member attending every doorway at limited points of entry.

Armed with an iPad, these faculty members would receive a notification when a student entered and registered an elevated temperature. They would then visually identify who needs a secondary screening with a non-contact infrared thermometer, one of which was issued with each camera. If the secondary screening verified an elevated temperature, the student was sent immediately to the nurse's office for further evaluation.

Results

Florence City Schools administrators were able to instill a level of confidence within their community that they were taking every precaution to ensure the health and safety of their kids.

nSide stayed engaged well beyond installation, working hand-in-hand with the district to promote the social component of the process and help optimize the system.

Over a six-month period, the average number of elevated body temperature notifications per month was 491. Temperatures ranged from 99 degrees Fahrenheit to 104. The highest percentage of elevated temperatures was recorded at one of the high school campuses.

Valuable Lessons Learned

McKinney cites two key lessons learned through this, his company's first installation of its kind. First, he says, they quickly learned the process works best when there are two faculty members stationed at each entryway: one to manage the flow of incoming students and visually check for elevated readings, the other to administer the secondary screening and take necessary action.

Second, thermal cameras are scientific devices with a lot of environmental sensitivities and guidelines set forth by the FDA for optimal use. If these sensitivities and/or guidelines aren't strictly adhered to, the chances for false positive readings increase. "There was a level of frustration at the volume of false positives," explains McKinney. "We quickly understood we needed to provide more education around the understanding that false positives are okay. It's the statistical norm; it's what you should see. Granted, you don't want too many, but that's better than letting someone through who actually has a fever."

Going Forward

"I don't think we're going to see an end to the coronavirus anytime soon. We'll continue to need vaccinations and boosters for COVID and other infectious diseases, so we'll continue to need this technology," concludes McKinney. "And, we're already looking ahead to the next generation of thermal cameras and what artificial intelligence (AI) will enable; for example, reliable weapons detection. We can already detect cold metal on a body, it's just a matter of perfecting the AI for consistent identification. From a school safety perspective, this will continue to be extremely valuable technology."

Customer partnered with EEN Certified Reseller nSide for the implementation.

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