



The York Water Company Improves Security with INTREPID™ MicroPoint™ Cable

Southwest Microwave Provides Perimeter Security System for Pennsylvania Water Utility



Water utility companies are entrusted to store and distribute potable water to thousands of people and businesses in the communities they serve. Making sure this water is safe and secure is top priority for these sites, and with such a huge responsibility comes a unique set of security challenges.

Concerns about water contamination, equipment damage or anything that would compromise the safe delivery of clean water has prompted many water utilities to install advanced security systems as an even greater defense against potential threats. Furthermore, after the 9/11 terrorist attacks, the need to heighten the security of our nation's water utilities became an even more pressing issue, causing many water companies to integrate sensor-enabled fences and other security solutions to better monitor their facility's perimeter.

The York Water Company in York, Pennsylvania is no different. This utility provider realizes the importance of properly protecting the product they deliver. To help elevate the level of security for the resources across its

150-square-mile site, the York Water Company looked to Southwest Microwave for solutions.

Heightening Security

The York Water Company supplies an average of 20 million gallons of water to more than 50,000 residential, commercial and industrial customers. Servicing 34 communities in Pennsylvania, the York Water Company delivers water to over 150,000 people, and stores water above and below ground in enclosed tanks. The site encompasses three separate facilities: one containing the filtration plant, another containing the generator and an offsite pumping station.

As a proactive response to 9/11, the York Water Company's leaders decided to upgrade the existing security system—which comprised a simple perimeter fence surrounding the facilities—to help ensure that they could successfully thwart any potential terrorist activity. Tim Barefoot, Senior Electronics Technician at the York Water Company, led this effort.

"We researched different systems we could install to secure our fence," says Barefoot. "We came across Southwest Microwave's INTREPID™ MicroPoint™ Cable system and immediately liked what we saw. We felt that its features were exactly what our facilities needed."

Because the system could pinpoint cut and climb attacks to within 10 feet (3 meters) of an occurrence and ignore harmless disturbances like wind, rain or vehicle traffic, Barefoot was confident that MicroPoint Cable would provide reliable detection while preventing the nuisance alarms that plagued other fence sensors.



INTREPID™ MicroPoint™ Cable pinpoints cut and climb attacks to within 10 feet (3 meters) and ignores harmless disturbances like wind, rain or vehicle traffic, solving nuisance alarm problems.

Hands-On Installation, Seamless Integration

After deciding on INTREPID MicroPoint Cable, the York Water Company sent electronics technician, Kevin Krueger, to a three-day technical training class at Southwest Microwave's headquarters in Tempe, Arizona to certify the York Water Company in MicroPoint Cable system hardware, software and installation procedures.

After receiving hands-on experience with the system during the factory training session, Barefoot, Krueger and the rest of the York Water Company crew began by hanging cable on the fences, then creating custom site maps for their facility and specifying detection zones using INTREPID's installation software. Once the team powered everything up, they calibrated and tested the system themselves.

"Rather than hire an integrator to undertake the installation, we opted to perform the work in-house and integrate the entire system ourselves," says Barefoot. "We chose to do it ourselves because this way we would be fully aware of how the system operated, and in the event that something went wrong, we would know why it occurred and how to fix it."

Barefoot continues, "Installation of the INTREPID system was simplified because of Southwest Microwave's training program, and the fact that we were able to integrate this perimeter security system seamlessly proves that INTREPID MicroPoint Cable is user-friendly. Ease of installation and use on a scale of one to ten are a ten."

Proven Reliability

INTREPID MicroPoint Cable was installed on all three of the York Water Company's fences. The fence surrounding the filtration plant and the other around the generator equipment were the first to be taken live in 2002. The third fence, encircling the offsite facility, was just recently equipped with the INTREPID system.

"If someone tries to climb or cut the fence, the system will pinpoint the exact location of the intrusion attempt," says Barefoot. "We've integrated the INTREPID system with cameras and an alarm monitoring system so that our guards can visually identify threats easily anytime and anywhere along the fence. Since INTREPID has been in place, we have not had any break-ins."

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Senior Electronics Technician,
The York Water Co.*

Adjustable Sensitivity

With traditional fence detection sensors, fencing must be uniform across the protected area to achieve uniform intrusion detection. One of the INTREPID system's unique features is its patented Sensitivity Leveling™ capability, which compensates for variations in fence fabric or fence condition - resulting in uniform detection of disturbances across the entire coverage area. Being able to affix a sensor to their existing fencing without incurring the traditional expense of pre-installation fence maintenance translated into significant cost savings for the York Water Company.

"INTREPID MicroPoint Cable is a very reliable and cost-effective perimeter security system, and so far we've been very pleased with its performance," says Barefoot.

"Ever since the INTREPID system was set in place, we've hardly experienced any nuisance alarms and we've never felt more secure than we do with this security system. In addition, we feel that a state-of-the-art system like INTREPID serves as a deterrent to potential intruders."

Staying Alert

Given the vulnerability of water utilities, the York Water Company understands that threats will continue to be an issue, and that their facility will be subject to new risks. In addition to testing the INTREPID MicroPoint Cable system weekly to make sure everything is functioning at peak performance, Barefoot explains that it is also



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important for the York Water Company to constantly be on the lookout for new technologies that will continue to fortify their facility's security program.

"It's highly crucial that we protect our facility as best we can, so we stay on top of technology and commit to making improvements to our perimeter security where necessary," explains Barefoot. "If we detect that there's a risk, we are equipped to address it."

"Our perimeter fence is our first line of defense, so we need it to be 100 percent effective," adds Barefoot. "With INTREPID MicroPoint Cable, working together with our cameras, alarm system and guards, we have equipped our fence with cutting-edge security technology, giving our water the utmost protection from contamination, vandalism and other threats."

For more information about the INTREPID™ MicroPoint™ Cable fence-mounted perimeter security system, visit www.southwestmicrowave.com



Southwest Microwave, Inc.

9055 South McKemy Street, Tempe, Arizona 85284

Telephone: 480-783-0201 | Fax: 480-783-0401

infossd@southwestmicrowave.com | www.southwestmicrowave.com

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INTREPID™

MicroPoint™ Cable
Fence Detection System

MicroTrack™
Buried Cable Detection System



Two revolutionary outdoor perimeter detection systems from Southwest Microwave. Engineered to protect the highest security sites and perform in harsh climatic extremes. MicroPoint™ Cable for perimeter fence applications. MicroTrack™ for covert protection.

INTREPID™ smart sensors offer unrivalled features and detection capabilities. Precise location of intrusion attempts to within 3 meters. Nuisance alarm problems solved via a unique technology that distinguishes legitimate attacks from harmless disturbances. Uniform detection along the entire protected area via Sensitivity Leveling™, a patented calibration feature that adjusts for variations in fence fabric or site terrain.

And since detection zones are specified in system software at any point along the cable, hardware requirements are minimized and superior detection is assured.



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9055 South McKemy Street, Tempe, Arizona 85284

Telephone: 480-783-0201 • Fax: 480-783-0401 • Email: infosd@southwestmicrowave.com

www.southwestmicrowave.com