

EMSI 1st to take LDAR clients wireless across the board

How many times have fugitive monitoring personnel wished that there was an intrinsically safe monitoring device that would allow for less electrical cords to break and a more stable information retention platform that was designed with the ability to be compatible with most personal digital assistance (PDA) and off-the-shelf software? The answer — countless times.

Now, there is no need to wish any longer because a working, tangible product meeting all these criteria is here. This revolutionary piece of equipment has run the gauntlet and passed all preliminary testing and debugging procedures, and recently received factory manual acceptance and approval in class 1, division 1 as well as classes A, B, C and D.

Created by LDAR Solutions LP, this innovative product is called the Wireless Data Acquisition (WDA)-1000 device. The WDA-1000 is designed to be used with almost any off the shelf software and nearly every type of handheld currently available to the industrial market. In addition to being able to operate with generally accepted and widely used commercial LDAR software applications, the WDA-1000 is capable of customization with regard to in-house proprietary software packages also used in the LDAR industry. “At Emission Monitoring Service Inc. (EMSI) we had hoped and dreamed that a truly revolutionary product would surface that would eliminate continual breakage of high-priced equipment,” said EMSI. “The advent of the WDA-1000 wireless monitoring system by LDAR Solutions makes that dream a reality.” Now EMSI have had their dream come true, they are making the most of it. Together with LDAR Solutions, EMSI has become one of the largest companies working in the LDAR industry and has been helping countless facilities meet the environmental regulations of both state and federal agencies for more than 20 years.

What’s the key to EMSI’s success? The answer lies in the technology itself. The “magic” behind the WDA-1000 came from the ingenuity of a software-design professional with more than 15 years’ experience in the handheld programming field. This system was designed around a data-retention, flexible and user-friendly approach that all but eliminates the chance of lost monitoring results. One of the best characteristics of this technology is that it has built-in, inherent, information storage capabilities. This, combined with data redundancy capabilities of handhelds themselves, makes stored electronic information almost immune to any possibility of loss. If the unit was to freeze, lock up, or power off or the information can be retrieved from one or more storage back-up locations.

“For those of us in the LDAR industry, we have a very specific and long list of requirements for the tools and equipment we employ,” said EMSI. “The lightweight, rugged and weather-resistant WDA-1000 is such a device, and it delivers dependability with benefits that are far-reaching.” For instance, the product is fully compatible with TVA 1000 analyzers, which are the most widely used monitoring devices in the LDAR industry. What’s more, the WDA-1000 is compatible with multiple handheld terminals for flexibility through the technology of Bluetooth™, allowing multiple handheld units to be used in the same proximity without interfering with other related units or non related radio equipment in the area operating on a standard radio frequency. “At EMSI, we have reaped man benefits since the WDA- 1000 phased in,” said EMSI. “This device has

proved to be an invaluable, cost-effective tool at not only the field technician level but at the data entry level as well.” record due to equipment. But for the people at EMSI, the ones who benefit most from this revolutionary technology are not themselves — it’s their clients. Keith Clift, who recently retired as the LDAR coordinator at the ExxonMobil facility in Baytown, Texas, has worked closely with EMSI for more than 10 years. An EMSI staff of as many as 33 employees worked onsite to help manage the facility’s LDAR program. “ExxonMobil wanted the LDAR program here to be the best in the ExxonMobil circuit,” he said. “They let me run with it, spend a lot of money and add whatever it took to make Baytown the benchmark for the industry. EMSI has been with us from the beginning. “We had the opportunity to build this program over the years. We were considered the model on the ExxonMobil refining and chemical circuits. EMSI really helped us with that.” One aspect that Clift liked in particular had to do with the WDA-1000 technology employed by EMSI personnel. Its wireless upload and download transmittal takes a matter of seconds per handheld in comparison to the old upload and download times of five to 10 minutes per handheld. “One thing that helped us is that they brought in new wireless technology for data loggers,” he said. “It’s a lot quicker and saves us money. We pay for their hours and the data clerk hours. There are as much as 100,000 pieces of equipment monitored every month, but they keep up well.” The workload certainly was demanding; the Baytown facility has more than 500,000 pieces of equipment all together, the majority of which had to be monitored four times a year. Annually, that’s 2 million monitoring instances just in scheduled monitoring alone. In fact, EMSI and its equipment performed so well that the EMSI staff became a fixture at Clift’s facility. “ExxonMobil is one of the largest oil companies in the world. We scrutinize our contractors very closely. To have kept someone for more than 10 years says something. You rarely see that. We have had other companies knock on our door, but we’ve always stayed with EMSI,” he said. Ed Diaz, LDAR coordinator for Trihydro, also likes the fact that the wireless technology used by EMSI is easy to use and more cost effective. “Before, the whole industry had been sending in their wires to be repaired all the time,” he said. “Wires get hung up, fried or frayed. I had been sending old equipment in for repair at about \$150 a shot. If you send in 15 each month, it gets pricey. “This product is definitely saving us money,” Diaz said, referring to the WDA-1000. “And it gives us real-time data straight from the machine. It’s more reliable. It won’t short out the machine. LDAR Solutions was definitely the right way to go. Plus, LDAR Solutions has excellent customer service, and they are always there to answer any questions you may have.” Another reason why the WDA-1000 is the right way to go has to do with the versatility of the equipment. Technology typically changes every 12-18 months. The makers of the WDA-1000 have taken this fact into account, so if the PDA that you have been using becomes discontinued or replaced with a newer model, the user simply starts using the replacement model with the wireless system. Diaz experienced first-hand the frustrations associated with working with out dated equipment. “We were using old technology that was about 15-20 years old,” he said. “It’s expensive because it’s difficult to maintain and find parts. The products supplied by LDAR Solutions were ready to use, and we spent a fraction of the cost we would have otherwise. It was inexpensive, durable and lightweight. It was just a better product. As opposed to spending \$2,000 for some cables, I just threw on another \$900 or so and had a wireless WDA.” Compliance assurance with fewer concerns related to lengthy downtime, costly repairs and the

difficulty in obtaining replacement parts in a timely manner, EMSI customers dedicate more of their time to the task at hand — compliance assurance. Staying in compliance and adhering to stringent regulations related to fugitive emissions is a full-time job at many industrial facilities. Those not in compliance are subject to fines and additional oversight by certain agencies. And let's not forget facilities that violate these regulations are also exposing their personnel to hazards related to the release of fugitive emissions. An employee working for a major oil refining facility also found that EMSI helped to improve the overall safety at the site. "EMSI monitors more than 80,000 components within our facility to ensure that we meet compliance with LDAR regulations. They monitor everything from valves to pump seals to flanges to make sure there are no leaks," the employee said. "I highly recommend EMSI," the employee continued. "They are capable of doing what a company needs and ensuring compliance. They are thorough, and they take ownership of the program to make sure that we meet all the compliance requirements." While EMSI is dedicated to assisting its clients with their present compliance issue, it is also looking to the future. The company is firmly committed to the continued exploration and acquisition of equipment that enables both its field personnel and its clients to benefit from an increased level of security and safety. To that end, EMSI continues to pursue the use of thermal technology and has recently added an infrared (FLIR) thermal-imaging camera. With the addition of the thermal-imaging camera, WDA-1000, new Software is and EMSI are lifting the LDAR industry from technological stagnation and helping facilities around the world save money and remain in compliance.