



OGTech
Technology Solutions

CASE STUDY

Controlling Access with RFID

OGTech and Metalcraft partner to provide access control solution for gated community

BACKGROUND

Gated communities have grown in popularity over time for their seamless blend of security, privacy and community living, with technology like RFID playing a pivotal role. Controlled access points equipped with RFID systems ensure only authorized individuals can enter, providing residents with enhanced peace of mind and streamlined entry processes.

OGTech, a systems integrator headquartered in Egypt, specializes in providing customizable radio frequency identification (RFID) solutions and security systems throughout the Middle East and North Africa (MENA) region.

CHALLENGE

OGTech works with organizations like La Vista City, a real estate development in Egypt, that was looking for access control and parking systems for their compounds all over Egypt. According to Engineers Maged Mourad and Ahmed Maamoun from OGTech, La Vista City had the goal of having a high-performing RFID tag with excellent read range for their application. In addition, they wanted to have colorful logos on the tags yet have them be durable enough to withstand the outdoor conditions, namely UV exposure.

SOLUTION

Mourad and Maamoun proposed their Smart Gate solution for the project and looked to Metalcraft, an Iowa-based manufacturer of identification products including RFID tags and labels to complete the solution. OGTech and Metalcraft have shared a strong partnership over the years built on mutual trust and open communication, allowing both companies to innovate and respond effectively to market demands and contribute to the smooth operation of OGTech's manufacturing process.

The team at OGTech worked with Metalcraft Senior Territory Specialist Jodi Torkelson to develop a custom Destructible RFID Windshield Tag for the potential project.

Numerous systems integration companies participated in the proof-of-concept stage with La Vista City, but the Metalcraft tags stood out due to their excellent read range (7+ meters), the durability of the tag material and the performance of the adhesive. In addition, the Metalcraft RFID tags featured security slits in the design of the tag to aid in destruction of the tag if someone tries to remove it from the windshield.

The Metalcraft Destructible RFID Windshield Tags were digitally printed and featured stunning graphics much to LaVista's delight.

After the RFID tags passed the proof-of-concept stage, they were tested against water and chemicals. They were also sent through the car wash multiple times to see the effect of the chemicals and brushes on the tag. The Metalcraft tags passed with flying colors.

RESULT

The Metalcraft RFID tags are performing quite well. They have excellent read range, very good material and adhesive. The tags also have stunning colors and are resistant to different solvents, high temperatures and UV rays.

Everyone at OGTech enjoys working with their territory specialist Jodi Torkelson. According to Mourad, "She is exceptionally friendly and approachable. Jodi is always ready to assist and is known for her quick responses and consistent availability".

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MAGED MOURAD

- Engineer at OGTech