PRESS RELEASE

SensThys and Smartrac Partner to Provide RFID-Based Moisture, Temperature and Location Sensing Solution

Amsterdam (The Netherlands) / Cupertino (USA), October 23, 2019 – Smartrac Technology Group, a global leader in RFID technology and IoT solutions, and SensThys Inc., a technology company that seamlessly integrates sensors and communications with a high-efficiency networking platform, have partnered to provide an innovative RFID-based moisture, temperature and location sensing solution for facilities management.

The new solution combines SensThys' full line of RAIN RFID (UHF) readers and algorithms with Smartrac's custom-built moisture and temperature sensing RAIN RFID inlays and tags, based on its successful SENSOR product line of passive products. By detecting moisture and measuring temperatures in a wide variety of building materials, including concrete, gypsum board, insulation and other construction materials, it enables a broad portfolio of innovative applications for facility and construction monitoring and management.

Passive sensing inlays and tags from Smartrac
To provide the best possible accuracy and reliability when embedded in construction materials with diverse physical characteristics, Smartrac's high-quality, battery-less SENSOR inlays are optimized for interaction with readers and software infrastructure provided by SensThys. The thin and customized inlays are equipped with Axzon's Magnus® S3 ICs that can accurately detect and measure temperature and moisture levels in the surrounding environment. Like Smartrac's other SENSOR RAIN RFID products, this solution-specific product offers cost efficiency and ease of implementation.

The sensing inlays are interrogated using SensThys' solution to monitor and track the physical state of the product at construction sites, distribution yards and manufacturing facilities. Key applications include tracking infrastructure components such as roofing materials, monitoring changes in products including thermal and moisture cycling, and tracking concrete pre-casts that are either in inventory, in transit, at holding facilities, or physically embedded within their final infrastructure.

Reader and algorithms from SensThys
The SensThys SensX Extreme RFID reader is ideal for the construction industry due to its physical robustness, which includes IP67 rating, key military standards testing, and a wide operating range including cold starts and thermal shock. The 33dBm reader has a sweeping array of sensors, including an accelerometer, gyroscope, barometric pressure, GPS and BLE beacon detection, that together enable situational awareness including its physical position,

orientation and movement. Communication is handled natively by internal Ethernet, Wi-Fi or Bluetooth, with an external cellular connection available. SensThys created the algorithms to rapidly compute the location, temperature and moisture of a tag embedded within an object. These algorithms are now available for use on all M-Power readers including the SensArray and the SensX Extreme, and the algorithm can be made available for incorporation into other fixed and hand-held readers.

Solutions for real-world problems

"This design effort, coupled with extensive in-situ testing, resulted in an upgraded M-Power reader capability to offer customers a practical method to quickly and reliably interrogate Smartrac's sensor tags. Our IP67 SensX Extreme reader, which uses the M-Power core, allows us to identify the tagged item and provide the location, time, temperature and moisture information of the asset," said Jo Major, CEO of SensThys. "For example, the seamless integration of sensors enables customers to understand where and when a roof has started to leak or when a concrete foundation is fully cured."

"By embedding our high-quality SENSOR inlays into building materials when they are manufactured, customers can now really make their building material product line smart," said Bill Barr, VP Product Management at Smartrac. He continued, "The great work we've accomplished together with the SensThys team provides a sensor-to-cloud infrastructure for non-destructive testing, so our customers can conveniently deploy temperature and moisture sensors in a variety of tough environments."

About SensThys:

SensThys offers the world's most functionally integrated RFID and sensor solutions with novel networking capabilities. SensThys products are designed to be attractive, unobtrusive, and deployable in a wide range of settings, from retail spaces to rugged outdoor environments spaces. These products enable the lowest-cost deployed solutions, in addition to ensuring robust power management and data networking. The company includes management experience from Intel, SDL, Motorola, JDSU, Avanex, AMD, Watkins-Johnson, Harris, Varian, and VLSI and industry expertise from NXP, Alien, Thinkify and Digime. SensThys is a member of RAIN RFID. SensThys, Inc. is a portfolio company of InSite Partners, LLC. SensThys, SensArray, SensRF are trademarks or registered trademarks of SensThys, Inc. For more information about SensThys, please visit www.sensthys.com.

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About Smartrac:
Smartrac is a global market leader in RFID products and IoT solutions, providing both ready-made and customized offerings. We make products smart, and enable businesses to digitize, identify, authenticate, track and complement products and solutions. Our portfolio is used in a wide array of applications such as animal identification, automation, automotive, brand protection, customer experience, industry, library and media management, logistics, retail, supply chain management and many more. Leveraging our global Research & Development Centers, production and sales network, and IoT solutions platform Smart Cosmos®, we embed intelligence into physical products, empowering the ecosystem of connected things. Smartrac received ARC Quality Certification from Auburn University's RFID Lab for the design and manufacturing of its RFID inlays and tags. Smartrac has its registered headquarters in Amsterdam, the Netherlands. For more information, visit www.smartrac-group.com, follow Smartrac on Twitter, LinkedIn or sign up for a quarterly newsletter.

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