Rain Bird Integrated Sensor System

While advanced central control systems make it possible to manage golf course irrigation throughout the course from one computer, these systems do not measure soil conditions where they matter most - in the root zone. That's why Rain Bird offers the Integrated Sensor System (ISS), a multi-component soil sensing system that provides accurate snapshots of soil conditions and the ability to automatically adjust irrigation system run times.

"The ISS takes irrigation system control technology to a new level, helping to ensure the most consistent playing conditions and improved course sustainability," said Bruno Quanquin, product manager for Rain Bird's Golf Division. "Because superintendents know exactly what's going on with their



turf, they can successfully manage irrigation while potentially reducing water. fertilizer, herbicide and pesticide costs for an improved bottom line."

The ISS is the only soil sensing system in the industry that delivers real-time full central control integration. Sensors transmit soil moisture, salinity and temperature data to the system's Soil Manager software, which in turn works with the course's central control system to make real-time decisions about when and how long to irrigate. Because of its full integration with Rain Bird central control software, the ISS can automatically set individual station run times based on changes in soil moisture. Because superintendents define all the parameters, they retain total, customized control of their irrigation systems at all times.

Located in important areas on the course, the system's Data Loggers





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receive and store data from up to 18 sensors each, transmitting the information through a wireless mesh communication network to the Soil Manager Software. If transmission is impeded by long distances, undulating terrain or line-of-sight obstructions, information is routed through a Data Repeater on the course to the computer. The number of Data Repeaters installed on a course will vary depending on the number of sensors and course topography. Signal range and strength can be extended with additional Data Repeaters.

The Data Logger displays sensor data on a large LCD screen with an extensive menu. Superintendents can read the sensor information at the Data Logger and immediately evaluate soil conditions without having to return to their office computers. Data is backed up on the Data Logger's SD card, keeping it safe even in the event of a power outage. Data is also stored on the course's irrigation computer, eliminating the need to subscribe to expensive thirdparty Internet monitoring services.

Each system's Data Logger also provides power to the sensors, making it unnecessary to dig up the greens after a few years to replace sensor batteries as in competitive sensing systems. Plus, unlike those competitive technologies, Rain Bird sensors provide accurate readings immediately after installation with no need for calibration.

"Research has shown that some superintendents want the information provided by sensing systems, but they don't have the budget to purchase many sensors all at once," Quanquin says. "That's why we made the ISS easy to expand. Superintendents can start with one sensor and then add to their systems as demand and budgets permit."

For more information, watch the flash demo at www.rainbird.com/ISS, contact your local distributor or call 1-800-RAIN BIRD.