

# "Among the most important issues facing the game of golf is that of water use". James T. Snow, National Director USGA Green Section



### ESI Soil Moisture Sensors enable you to precisely irrigate your golf course

Accurate knowledge of the moisture in the soil of your course can help you to:

- Decrease energy use and associated water costs
- Increase your golfers' satisfaction with your course by increasing the quality of greens and fairways
- Differentiate your course as a leader in environmental practices and efficient water use
- Deploy your resources and personnel where they are most needed
- Decrease costs associated with fertilizer runoff

#### ESI soil moisture sensors are internationally recognized for their accuracy and reliability

According to the Irrigation Association, the use of Evapotranspiration (ET) data will save an average of 5 to 15% in water use whereas Soil Moisture Sensors will help save an average of 15 to 30% in water use.

ET only accounts for part of the story of what happens to water – what happens above the ground. Different soil types lose differing amounts of water at varying speeds. Understanding what happens to water in the ground can help you to make effective management decisions that optimize energy and water use, while ensuring a high quality course.





### **ESI Golf Course Solutions**

**Gro-Point**<sup>™</sup> provides accurate, cost effective soil moisture measurement. **Gro-Point**<sup>™</sup> can be deployed in irrigation sensitive zones, such as around greens, to enable you to take full control of your precision irrigation needs.

**Gro-Point**<sup>™</sup> responds immediately and accurately to changes in soil moisture. The sensor is designed to remain in the soil permanently. **Gro-Point**<sup>™</sup> is rugged, easy to use, and maintenance free. Manufactured in stainless steel with all electronics sealed in water-proof epoxy, **Gro-Point**<sup>™</sup> provides years of reliable service.

**Gro-Point**<sup>™</sup> can be combined with a sophisticated, graphically based computerized control system, capable of interfacing with a wide variety of irrigation equipment, including pumps, valves, filters, fertilizer injectors, soil moisture sensors and weather station sensors. Unique irrigation scheduling abilities allow for time based, demand and deficit irrigation, based on soil moisture or other environmental parameters.

**Gro-Point**<sup>™</sup> can be used with a hand-held display reader, a radio-telemetry system for centralized data gathering and is compatible with all leading datalogger brands.

## Gro-Point<sup>™</sup> Sensor Specifications

#### **Sensor Options**

• GP-SS for sandy soils

- GP-MS for most soils
- GP-HS for saline & clay soils

Moisture Range • 8 - 42% (0.08 - 0.42m3/m3)

• Operating: 32 to 150°F (0 to 65°C)

Power Requirements • Standard: 5.5 - 18 VDC, 10 -20mA (max)

#### Output

- Standard format: 0.5 5.0mA
- Optional formats: 0 2.5V,
- 4 20mA

#### Connection

• Standard: 3 Pin, IP66/IP68 rated environmental connector

**Accuracy** • <1% (+/- 0.01m3/m3)

Mechanical • Weight: 1.15 lb (525g)

Weight: 1.15 ib (525g)
Dimensions: 3.75" x 1.5" x 9.5" (9.5 x 3.8 x 24 cm)

