AquaSpy™ Probe

The AquaSpy Probe is an advanced soil moisture monitoring device that saves water and enhances water use efficiency. Available in 20", 40" and 60" lengths, with a sensor at every 4" depth, and as sub-surface or ‘above ground’ variants, the AquaSpy Probe is the ideal solution to accurately monitor moisture changes in the soil.

Soil Moisture Monitoring Device

- Uses capacitance (FDR) technology
- Digital RS-485 output facilitating multi-drop capability
- Choice of 3 protocol options:
  - RS-485 ASCII Simplified
  - RS-485 AO (for AquaSpy Telemetry only)
  - SDI-12
- Re-programmable re-addressability on 2 wire RS-485 bus
- In-situ firmware reprogrammable using boot-loader software
- Programmable averaging algorithm
- Programmable internal polling period
- O/P range/resolution 0 to 65535 (16 Bit)
- Scaled frequency output range 0-130 (ideal for heavy soils and those with high salt content).
- Measurement resolution 0.008% (Scaled Freq*100)
- Multiple sensors spaced every 4” down the length of the probe:
  - 20” (5 sensors)
  - 40” (10 sensors)
  - 60” (15 sensors)
- Operating range 23°F to 122°F
- Temperature affects ±5%, 32°F to 104°F (without compensation applied)
- 7.5V-16V power requirement with low consumption
- Idle current 1.1mA. Avg current 1.64mA for a 10 sensor probe reading every 900 seconds
- Peak current of 65mA for 30ms per sensor read
- High impact rigid U-PVC construction (OD 2.17”), with low dielectric constant
- Standard cable 13ft extendable to 820ft on 2 pair twisted ‘backbone cable’
- Metal insert in moulded end-cap for added protection and quick subsurface location
- Slurry installation technique required
- Rugged subsurface polyurethane (UV stabilised) communications cable with Switchcraft EN3C4M connector:
  - 24AWG wire
  - 4 core
  - 7 conductors (OD 0.008")
  - 0.012” insulation thickness
  - 80pF/m nominal wire to wire capacitance
  - 0.2” nominal outer sheath diameter
  - V-90 HT PVC insulation
  - Aluminium/polyester laminate with tinned copper drain wire screen
- Firmware parameters, inc. temperature coefficients, can be tailored using AquaSpy Field Utility software
- IP68
- One year warranty