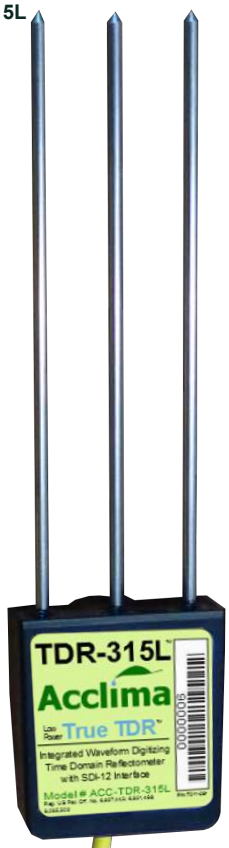
Setting the Standard

TDR-315L™

The TDR-315L is a true Time Domain Reflectometer system (minus the coaxial cable) wrapped up in a small, rugged, permanently installable package. This model is ultra low power yet it sacrifices none of the accuracy of its big brother the TDR-315. Acclima True TDR technology is a major, patented breakthrough in soil water and EC measurement technology.

TRUE TDR™ Accurate - Reliable - Affordable

Model # ACC-TDR-315L



Made in the USA

Performance:

- Sensor accurately reports soil VWC, temperature, permittivity, and EC in all soils.
- Permittivity is derived from first principles using a digitized TDR waveform--exactly like comparable systems costing 20x more. The permittivity reading is ±1% accurate in soils out to 4 dS/m Bulk EC.
- Volumetric Water Content is calculated from permittivity using a proprietary dielectric mixing model that closely tracks the Topp Equation to around 50% VWC but provides additional range to 100% VWC.
- Bulk EC is measured using well proven TDR techniques based on long term waveform amplitude readings + Pore Water EC is also reported.
- Temperature is reported to better than ±0.5 degrees C.
- Operates on any SDI-12 version 1.3 compliant data logger including Acclima's DataSnap.

Advantages Over Conventional TDR:

- The sensor is a completely self-contained TDR system which includes a microcomputer in the sensor head with waveform interpreting software preloaded.
- Much lower cost -- affordable and rugged enough to be permanently deployed in situ.
- No bandwidth constraining coaxial cable between electronics and the waveguide.
- Fast 300ps rise time delivered to the soil.
- 5ps resolution in digitizer and signal processing algorithms.
- 8 GHz input bandwidth to the receiver digtizer.
- Deliberate small electronics housing to facilitate easy installation, and soil re-compaction.
- Very low power, battery operable.

Acclima

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