
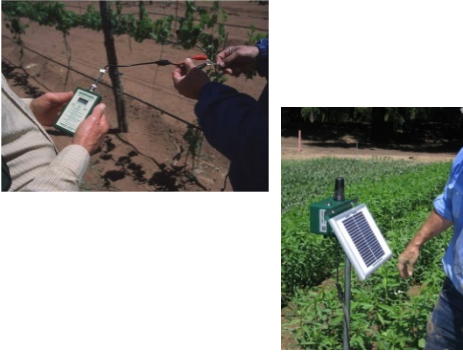




## Selecting and Shopping for My Soil Moisture Monitoring System / Service

Component	Questions to Ask	Notes
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Soil Moisture Sensors</b></p> 	<ul style="list-style-type: none"> <li>• Does it report soil water as centibars of tension or % water content?</li> <li>• Are they able to sense moisture at various depths and down to the bottom of my root zone?</li> <li>• Will it work in my soil type (i.e. gravel, sandy, loam or clayey)?</li> <li>• Will the measurements be impacted by salinity (i.e. fertilizer or other salts)?</li> <li>• Will the measurements be impacted by temperature?</li> <li>• Will it work for my irrigation system type? (Drip and micro spray – irrigate every 1 to 3 days. Sprinkler, furrow, border – irrigate every 4 to 14 days)</li> <li>• How difficult is it to install them in my soil?</li> <li>• How many monitoring sites will I probably need to represent my field?</li> <li>• Can it be installed or easily removed such that it's safe from tillage and other equipment?</li> <li>• How long will it last and what maintenance is required?</li> <li>• How will I know if it is working properly (e.g. what will measurements look like if it is failing?)?</li> <li>• What does it cost?</li> </ul>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Getting the data</b></p> 	<ul style="list-style-type: none"> <li>• Can I see the data on the unit?</li> <li>• Do I need to visit each site frequently to write down data or does it store it for occasional downloading?</li> <li>• Do I need special hardware or software to transfer the data to my computer or cell phone?</li> <li>• How frequently does it record data and how much data can it store (i.e. months)?</li> <li>• Can instantaneous readings be made (important if automatic sampling rate is less than hourly)?</li> <li>• Does it automatically overwrite the oldest data with new data when the memory is full?</li> <li>• Does it automatically send data elsewhere to be viewed or stored?</li> <li>• What maintenance is required (i.e. Battery life)?</li> <li>• Does it require reprogramming when without power for an extended time?</li> <li>• What does it cost?</li> </ul>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Processing and displaying the data</b></p> 	<ul style="list-style-type: none"> <li>• Do I have to make my own graph or does it create one automatically?</li> <li>• What does the data or graphing tell me about when to irrigate <u>and</u> how much to apply?</li> <li>• Can I input my irrigation dates and how much I applied?</li> <li>• Does the graph allow me to visualize the current moisture level in relation to field capacity, my target dryness and the amount of water I applied?</li> <li>• How well do the field capacity and target dryness levels represent my soil?</li> <li>• Can the software incorporate evapotranspiration (ET) data as from CIMIS?</li> <li>• Does it keep a running total of crop water use and water applications amount of water applied?</li> <li>• Will it work on my computer/ cell phone?</li> <li>• What does it cost?</li> </ul>	

Service		<ul style="list-style-type: none"> <li>• Do I install and set up the system myself?</li> <li>• Who do I call when I have problems with the hardware or software?</li> <li>• Is help available for interpreting collected data?</li> <li>• What is the upfront cost?</li> <li>• What is the monthly cost?</li> </ul>	
---------	--	---	--

### Sample Desired Soil Moisture Data Display

