

SQM-LE Weatherproof housing

Features

- White surfaces reflect the hot summer sunshine.
- Opening on bottom to allow moisture to escape.
- Glass top to prevent scratching when removing ice.
- Raised glass surface to prevent dirt and leaves from collecting.
- Small glass opening to minimize internal heating due to the Sun.
- Cable opening at bottom sealed with open-cell (breathable) foam prevents insects from entering.
- J-B Weld Plastic Bonder to hold glass to plastic cap.
- Silicone seal around glass extends beyond glass-plastic interface to prevent ice from building in crevices.
- Hose clamps for easy mounting to pole.



Illustration 1: Installed outdoors

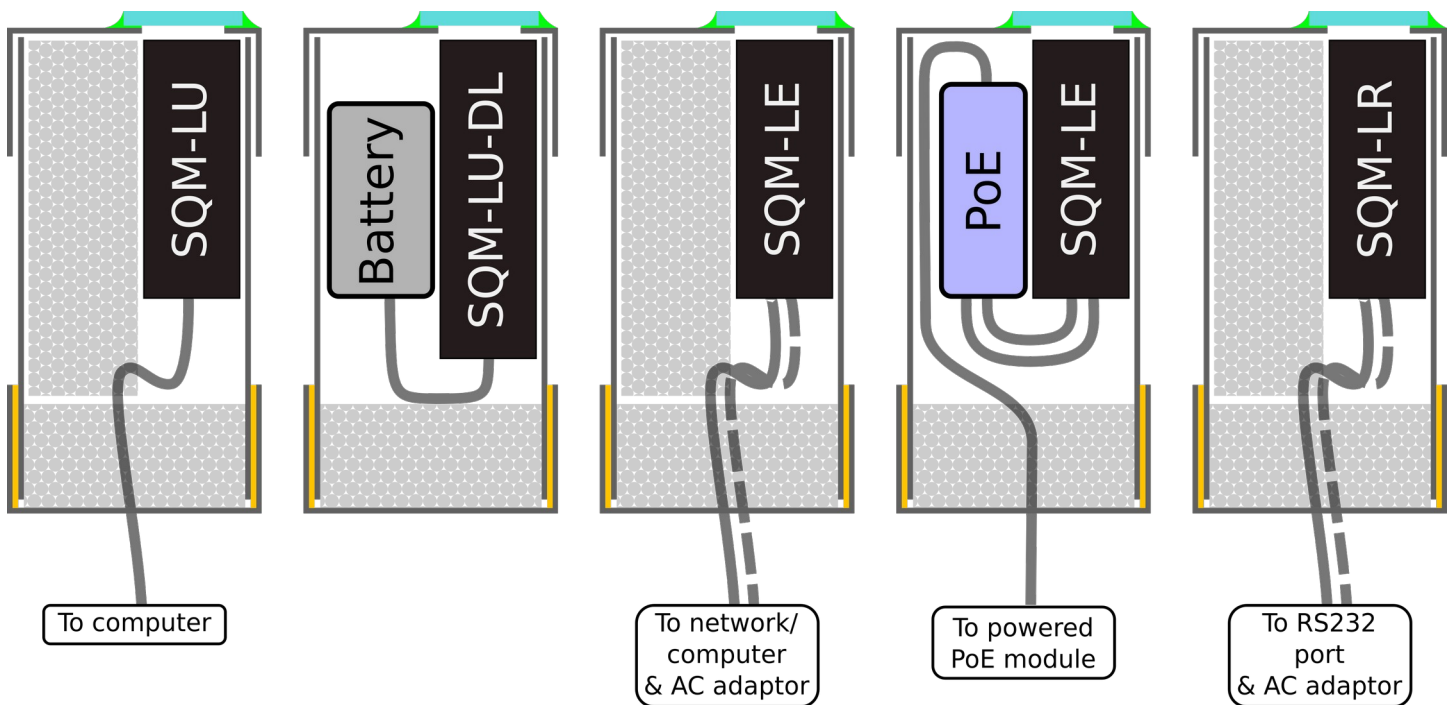
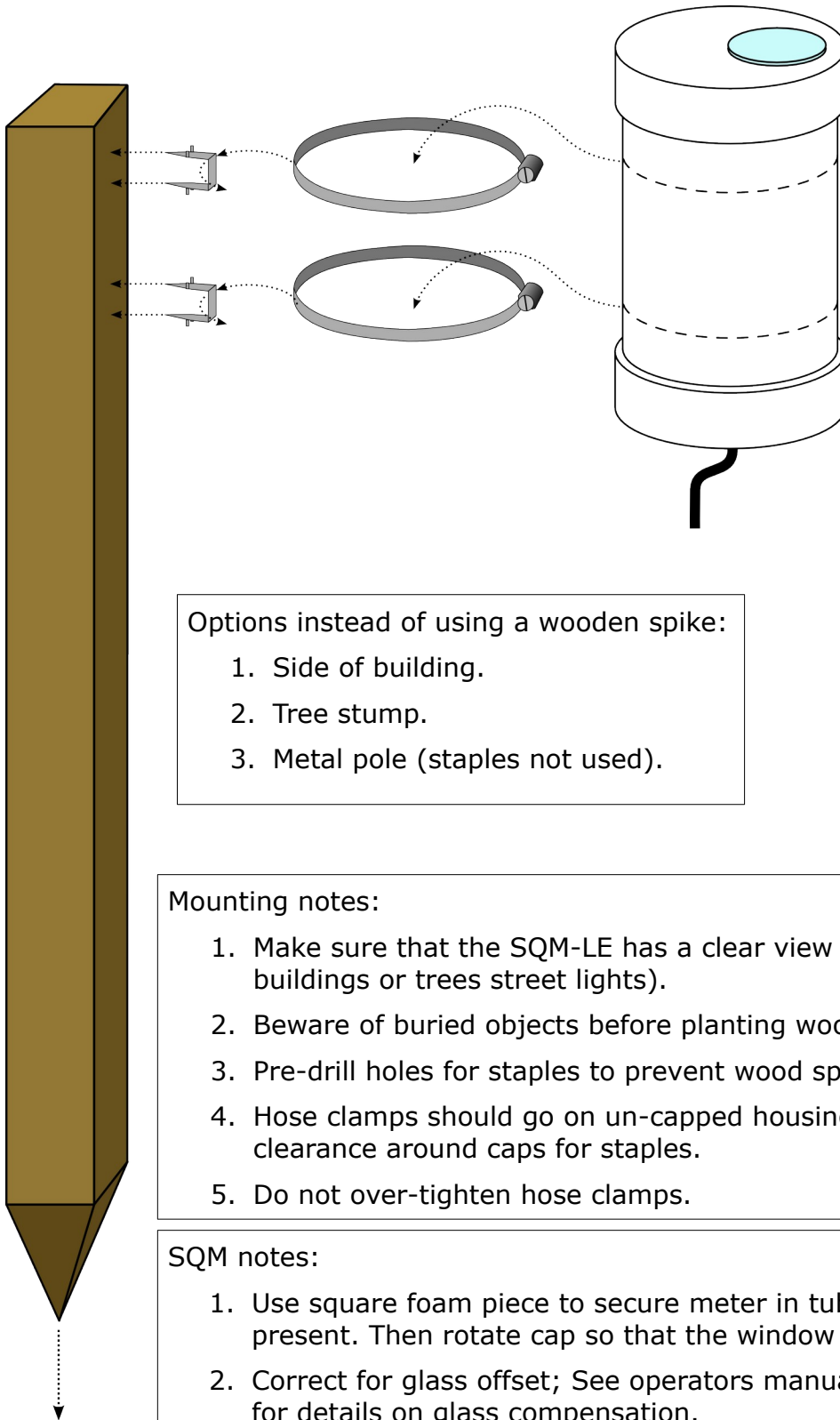


Illustration 2: Possible assemblies

Mounting

One possible mounting method is shown below:



Options instead of using a wooden spike:

1. Side of building.
2. Tree stump.
3. Metal pole (staples not used).

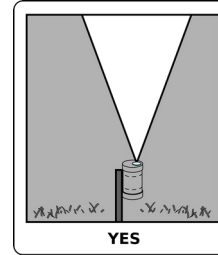
Mounting notes:

1. Make sure that the SQM-LE has a clear view of the sky (not blocked by buildings or trees street lights).
2. Beware of buried objects before planting wooden stake.
3. Pre-drill holes for staples to prevent wood splitting.
4. Hose clamps should go on un-capped housing area (center of housing) with clearance around caps for staples.
5. Do not over-tighten hose clamps.

SQM notes:

1. Use square foam piece to secure meter in tube when no battery or PoE is present. Then rotate cap so that the window is directly over the SQM lens.
2. Correct for glass offset; See operators manual (Section: Cover calibration) for details on glass compensation.

Field of view: The lensed meters see $\approx \pm 20^\circ$ cone of view. A building or pole will cause darker readings, a light in the field of view will cause brighter readings.



Cap placement: Make sure the cap is rotated to allow the lens to be completely unobstructed. Otherwise, readings will be darker than normal.

