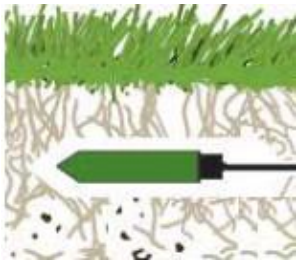
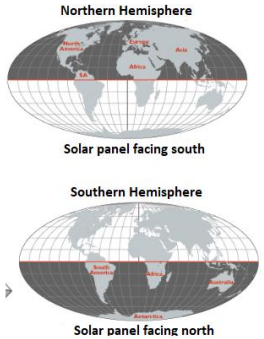
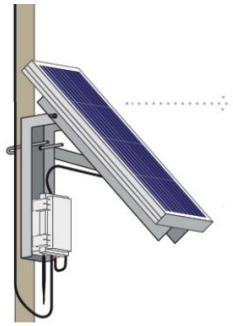
ICT INTERNATIONAL SNiP-SMT Quick Start Guide



1. Mounting the Node

SPLM7 bracket mounts 10W solar panel and S-NODE to a pipe with an outer diameter of 33mm - 53mm. Orientate the solar panel to face the equator





Attach the antenna to the base of the node. Remove the risk of inducing a static discharge to the Node by carefully grounding the SMA (M) pin of the Antenna to the outer brass rim of the SMA (F) connector on the Node.

2. Installing the SMT-100

Install sensors addressed 0 closest to the surface, with the highest number being the deepest probe. Sensors numbers are labelled on the cable at both the Node and Sensor ends.

Fully bury the probe, including the black housing, in good contact to the surrounding soil with no air gaps. Compact soil around the probe to field conditions. Install horizontally into the soil horizon. Flat blade surface of the sensor should be turned in an upright position so that no water can be accumulated on the surface of the green measurement area.

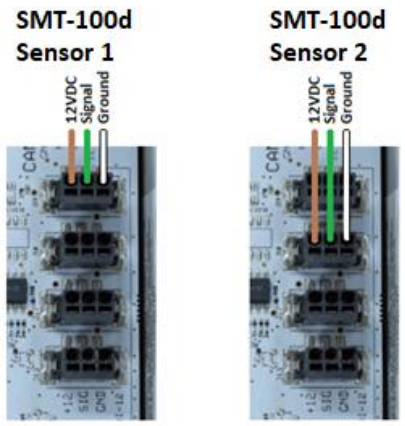
If the soil is very compressed, it is recommended to use a guide (1.6mm thick steel flat bar) or to soften up the soil by adding water. Do not use a hammer!

The cable of the SMT100 is very robust and can directly be buried inside any type of soil. Case in slotted electrical conduit above ground level to protect against physical damage.

3. SMT-100d – S-NODE Wiring

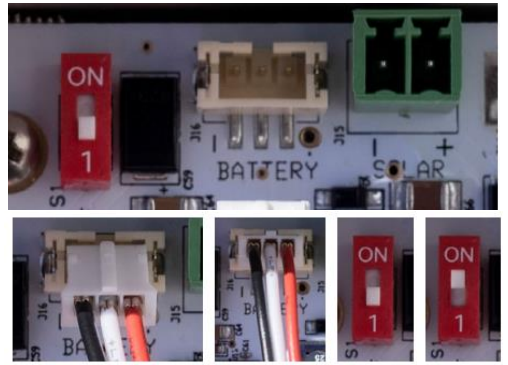
The SMT-100d is supplied pre-wired to the S-NODE, as pictured here. Prior to powering the system, verify that sensor wires are still connected to the board by very gently pulling back on each wire.

To remove sensor wires for installation, or for re-installing sensor wires into the spring loaded connection ports, refer to page 5 or the S-NODE manual:
https://www.ictinternational.com/content/uploads/2018/08/ICT-S-Node-C-Manual.pdf

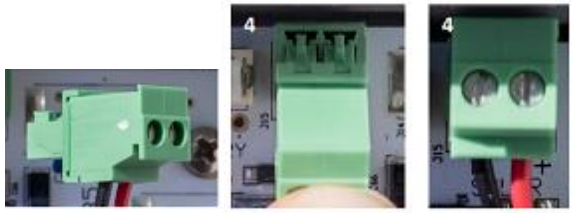


4. Powering-up the System

1. Ensure the internal battery is plugged into the J16 battery port.
2. Turn the power switch to the “ON” position



3. After the node is powered via the internal battery connect the solar panel plug



4. LED Sequence at power up:

- **LIGHT BLUE**: Joining Network
- **DARK BLUE**: Network Joined
- **ORANGE**: Transmitting sensor data
- **PURPLE**: Measurement Complete
- **GREEN**: USB Idle