

Water Level and Moisture Sensors

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Sensors & Modules

Water sensors detect liquid presence and level - conductive probes, float switches and capacitive modules - while soil moisture sensors measure how wet the ground is for plant projects. Both give projects signals for pumps, alarms and displays.

Key Features

- Conductive probe and float types
- Soil moisture with dual probes
- Analog output for levels
- Digital threshold outputs
- VCC/ground probes with corrosion risk

Typical Uses in the Workshop

- Auto-watering plant systems
- Tank level monitoring
- Flood and leak alarms
- Moisture-based displays

Safe Operation

1. Mount the sensor at the level to detect
2. Wire the probes to the module inputs
3. Calibrate the dry and wet readings
4. Filter readings in software
5. Protect connections from water

SAFETY NOTES

- Do not energise probes above safe voltages in water
- Keep electronics well above the water line
- Check probes for corrosion
- Do not use in potable water systems
- Store sensors dry

Maintenance & Consumables

- Clean the probe surfaces
- Replace corroded probes
- Re-calibrate after cleaning
- Check the wiring seals
- Keep spare sensors for classes

Specification & Buying Notes

Soil moisture modules with corrosion-resistant probes suit plant projects; float switches give reliable level detection. Quality probes last; bare copper probes corrode fast.