

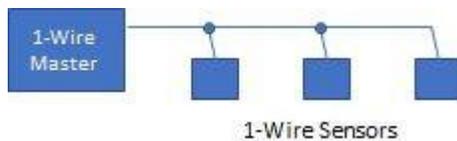
1-WIRE NETWORKS

What you will need:

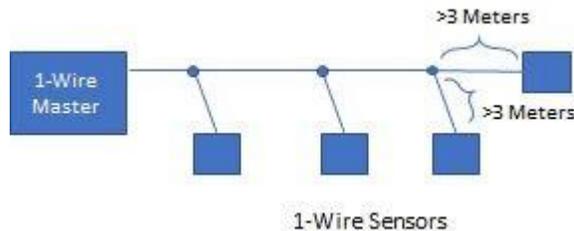
1. 1-Wire Master device (e.g. PowerWise inDAC or inBridge, SiteSage Gateway or sPod)
2. 1-Wire devices (e.g. Powerwise inSense sensors or 1-wire temperature sensors)
3. Twisted pair Cable (e.g. Cat 5e or Cat 6)

Wiring: 1-Wire networks can be wired in several different topologies, with the most common being linear, stubbed, or star.

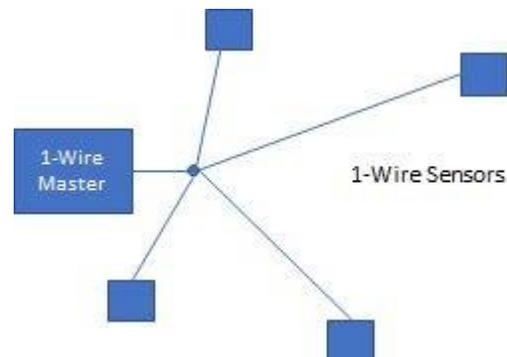
Linear topology. The 1-Wire bus is a single twisted pair, starting from the master and extending to the farthest 1-wire device. Other devices are attached to the 1-Wire bus with insignificant branches (< 3m).



Stubbed topology. The 1-Wire bus is a single a single twisted pair, starting at the master and extending to the farthest 1-Wire device. Other devices are attached to the main line through branches 3m or more in length.



Star topology: The 1-Wire bus is split at or near the master and extends in multiple branches of varying lengths. There are 1-Wire devices along, or at the ends of, the branches. (Not recommended for networks with long runs)



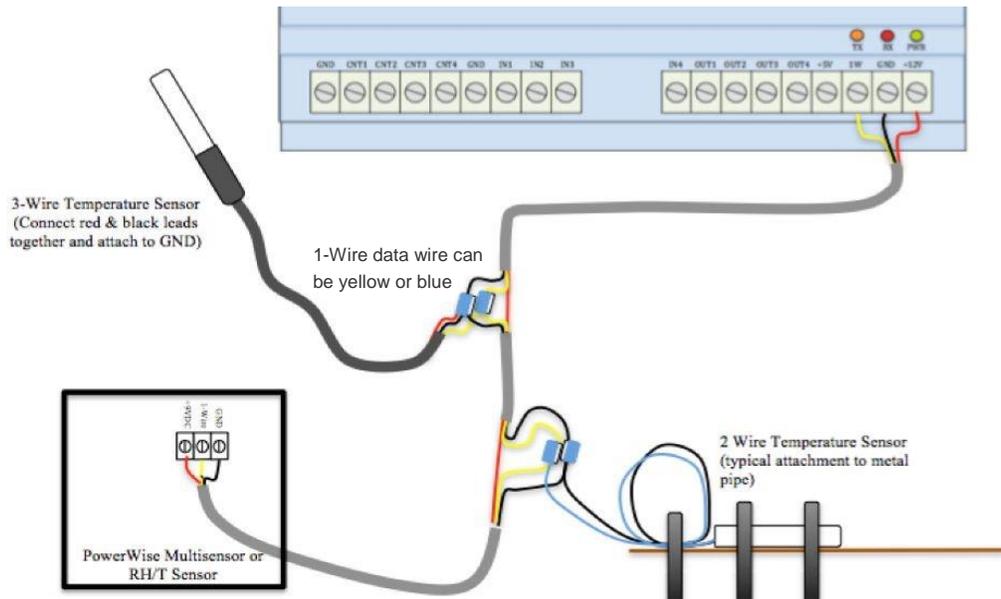
Unswitched star topologies (i.e., those with several branches diverging at the master) are the most difficult to make reliable. The junction of various branches presents highly mismatched impedances that can cause data errors. For this reason, the unswitched star topology is not recommended, and no guarantees can be made about its performance.

POWERWISE QUICK START GUIDE

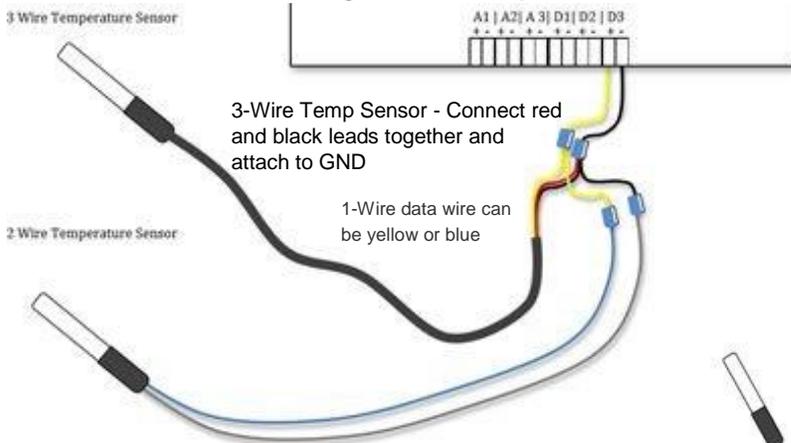
1-WIRE NETWORKS

Wiring Options:

PowerWise inDAC



SiteSage Gateway



SiteSage Gateway with PowerWise sensor hub

