

Vernier Sensor Interference Tables

The following tables were constructed by testing pairs of sensors in a 1L beaker containing 600 mL of water. The water was at 22°C and had a conductivity of approximately 6,000 $\mu\text{S}/\text{cm}$.

Good = no interference

OK = minimal interference; probably OK to use

Bad = interference on one or both sensors

Table 1a: One LabQuest as a standalone (on AC power)

	CON	DO	pH	ISE	SAL	ODO
CON	Bad	OK	Bad	Bad	Bad	Good
DO	OK	Good	OK	Good	OK	Good
pH	Bad	OK	Good	Bad	Bad	Good
ISE	Bad	Good	Bad	Bad	Bad	Good
SAL	Bad	OK	Bad	Bad	Bad	Good
ODO	Good	Good	Good	Good	Good	Good

Table 1b: One LabQuest as a standalone (on battery)

	CON	DO	pH	ISE	SAL	ODO
CON	Bad	Good	Bad	Bad	Bad	Good
DO	Good	Good	Good	Good	Good	Good
pH	Bad	Good	Good	Bad	Bad	Good
ISE	Bad	Good	Bad	Bad	Bad	Good
SAL	Bad	Good	Bad	Bad	Bad	Good
ODO	Good	Good	Good	Good	Good	Good

Table 2a: Two LabQuests as standalones (on AC power)

	CON	DO	pH	ISE	SAL	ODO
CON	Good	OK	Bad	OK	OK	Good
DO	OK	Bad	Bad	Bad	Bad	Good
pH	Bad	Bad	Bad	Bad	Bad	Good
ISE	OK	Bad	Bad	Good	OK	Good
SAL	OK	Bad	Bad	OK	OK	Good
ODO	Good	Good	Good	Good	Good	Good

Table 2b: Two LabQuests as standalones (on batteries)

	CON	DO	pH	ISE	SAL	ODO
CON	Good	OK	Good	Good	Good	Good
DO	OK	OK	OK	OK	OK	Good
pH	Good	OK	Good	Good	Good	Good
ISE	Good	OK	Good	Good	Good	Good
SAL	Good	OK	Good	Good	Good	Good
ODO	Good	Good	Good	Good	Good	Good

Table 3: One LabQuest attached to one computer or Chromebook (on AC or battery)

	CON	DO	pH	ISE	SAL	ODO
CON	Bad	Bad	Bad	Bad	Bad	Good
DO	Bad	Good	Bad	Bad	Bad	Good
pH	Bad	Bad	OK	OK	OK	Good
ISE	Bad	Bad	OK	Bad	Bad	Good
SAL	Bad	Bad	OK	Bad	Bad	Good
ODO	Good	Good	Good	Good	Good	Good

Table 4: Two LabQuests attached to one computer or Chromebook (on AC or batteries)

	CON	DO	pH	ISE	SAL	ODO
CON	Bad	OK	Bad	Bad	Bad	Good
DO	OK	Good	Bad	Bad	Bad	Good
pH	Bad	Bad	OK	OK	OK	Good
ISE	Bad	Bad	OK	Bad	Bad	Good
SAL	Bad	Bad	OK	Bad	Bad	Good
ODO	Good	Good	Good	Good	Good	Good

Table 5: One LabPro (on AC power or batteries) attached to one computer or Chromebook

	CON/SAL	DO	pH	ISE	ODO
CON/SAL	Bad	Bad	Bad	Bad	Good
DO	Bad	OK	Bad	Bad	Good
pH	Bad	Bad	Bad	Bad	Good
ISE	Bad	Bad	Bad	OK	Good
ODO	Good	Good	Good	Good	Good