



Pro-Note No: 2012-03

Date: 29 Jan 2012

Title: USB-to-LAN Adapters

Executive Summary:

Use a USB-LAN Connector for Laptops requiring 2 LAN connections

Observations:

Issue: Not Enough LAN Adapters on PCs/Laptops

Most PCs and Laptops only come with one LAN adapter. For surveyors with an Ethernet Inertial Navigation System (i.e. POS M/V, F180/185, HYDRINS, etc.) and R2Sonic Sonar two LAN Adapters are required.

Finding a second LAN Adapter for a PC is not difficult (PCI Cards) however the hardware restrictions on laptops are severe and ever-changing.

Solution:

Recently MosaicHydro successfully tested a Sabrent USB-to-LAN Gigabit Adapter (\$US 29.99) on a client system consisting of an R2Sonic 2024 and POS MV 320E on a laptop with only 1 LAN adapter. The Sabrent adapter was added as a second LAN adapter and configured to 1Gbps Full Duplex (See Pro-Note 2012-02) and the survey results were excellent.

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Figure 1: Sabrent USB - LAN Adapter

Unlike USB-to-Serial Connections that cause latency issues, none are created here as the INS and R2Sonic data are time-stamped prior to leaving the PCS and SIM respectively.

More Information:

Sabrent: <http://www.sabrent.com/category/networking/USB-G1000/>

Fry's Electronics: http://www.frys.com/product/6103389?site=sr:SEARCH:MAIN_RSLT_PG