USB-SDI12-Pro

Isolated USB -SDI-12 Media Converter



Introduction

The USB-SDI12-Pro sensor interface is an isolated general purpose interface for connecting SDI-12 based intelligent sensors to a Microsoft Operating system PC or laptop.

The USB-SDI12-Pro device can power a single SDI-12 sensor directly from the USB port of the PC, or a complete network string using an external 12V DC power supply connected to the external supply port.

A automatic self-resetting polyfuse is used to limit the maximum power that can be drawn from the USB-SDI12-Pro communications port. The device will power off automatically and restart if the network power consumption is to high.

The isolation properties of the USB-SDI12-Pro enable the device to be used with a laptop to create a very comprehensive data logging and reporting system when used in collaboration of the Q-LOG Data Acquisition & Display Software.

> Description No. SDI-12 Ports

Device Drivers

SDI-12 version **Direct USB Sensor supply**

External 12V DC Supply Terminal Pin size

Support for Microsoft XP,7, 8 64 bit operating instructions Microsoft Accredited driver

Automatic driver installation with Internet access.

FTDI Chipset

1.3

must not exceed 100 mA @ 12V DC

2 A @ 12V DC

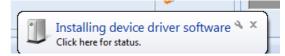
3.5 mm pitch

Select Image to download User Guide

Driver Installation

1. Connect the USB port of the media converter into a spare port on a PC.

After several seconds the following Window will appear on the bottom right hand side of the screen adjacent to the operating system toolbar.



and changes to

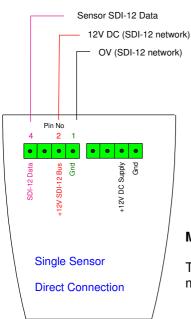


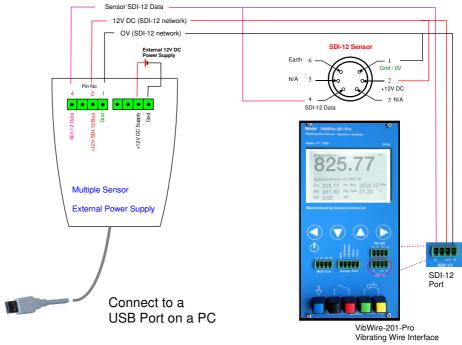
Once the driver is installed and operational

USB-SDI12-Pro Wiring Diagram

The wiring diagram below demonstrates how to connect an SDI-12 sensor to the USB-SDI12-Pro media converter.

So long as the maximum power consumption remains below 100 mA @ 12 V DC then a sensor can be powered directly from the USB port without any requirement for an external power supply,



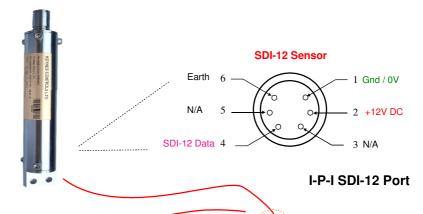


Multiple Sensor Installation

The example above shows how to connect multiple SDI-12 sensors to the USB-SDI12-Pro media converter. Take care to install an external supply when using multiple sensors.

USB-SDI12-Pro Media Converter Connections The drawing below shows how to connect a single In-place-inclinometer or PIEZO-RM SDI-12 intelligent sensor to the USB-SDI12-Pro media converter. SDI-12 Sensor Earth 6 1 Gnd / 0V N/A 5 2 +12V DC

In-Place-Inclinometer



DC Supply

12V

The example above shows how connect the water level sensor and In-Place-Inclinometer to the USB-SDI12-Promedia converter.

PIEZO-RM SDI-12 Port

SDI-12 Sensor

Earth 6

N/A 5

SDI-12 Data 4

Pin No 4 2 1

Grid

12V SDI-

To USB Port on a laptop or PC.

PIEZO-RM
Water Level Sensor

SDI-12 Data 4

FTDI Device Driver Download

The device driver for the USB-SDI12-Pro can be downloaded from http://www.ftdichip.com/FTDrivers.htm

Take care to download the correct driver for the operating system running on the PC being used with the USB-SDI12-Pro media converter



Laptop / PC USB Port

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Q-LOG Data Acquisition & Display Software

The USB-SDI12-Pro media converter is fully integrated into the Q-LOG data acquisition software.

Q-Log can be freely downloaded at:

http://www.aguabat.net/QLOGFree/glogv2.html

Using the USB-SDI12-Pro media converter in collaboration with the Q-Log applications software enables many different types data recording applications to be created.

Q-Log supports all of the Keynes Controls sensors and interfaces and can be configured to support third party sensors.

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