

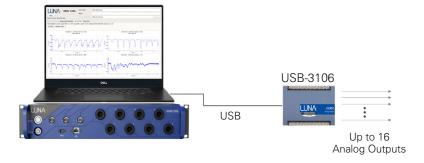
# USB-3106

# Analog Output Module for ODiSI

The USB-3106 works with the ODiSI 7100 Series interrogator to provide 16 channels of analog output signals controlled in real time by the value of select strain or temperature gages. This enables easy integration of high-definition fiber optic sensor measurements with analog interfaces of external measurement and control equipment.

The USB-3106 provides 16 channels of analog output. Each channel has a 16-bit D/A converter (DAC) that drives a voltage and current channel output. The voltage output can be configured to output of  $\pm 10 \, \text{V}$  or 0 to 10 V, while the current output provides 0 to 20 mA. Each channel has  $\pm 30 \, \text{V}$  overvoltage and indefinite short-circuit protection.

The USB-3106 connects directly to an ODiSI 7100 Series controller via a USB connection. Using the ODiSI application software, you easily select a gage and assign it to a specific output channel.



ODiSI 7100 Series
Optical Distributed Sensor Interrogator

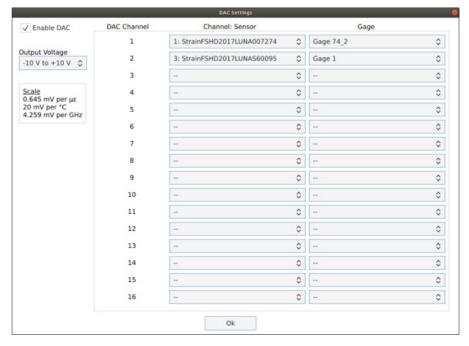
The USB-3106 adds up to 16 analog voltage or current outputs to an ODiSI system.

#### **KEY FEATURES**

- Up to 16 analog outputs
- Device can be configured to generate voltage or current outputs
- Easy integration with ODiSI system via USB
- Quick configuration within ODISI application software

#### **APPLICATIONS**

- Real-time feedback for closed loop control based on individual gage measurements
- Easily interface ODISI data to external measurement and control equipment
  - Analog controllers
  - Data loggers with analog inputs
  - Chart recorders



Configuration of the USB-3106 analog outputs in the ODiSI 7100 Series application software.

### **PERFORMANCE**

PARAMETER	Specification
Number of output channels	16, voltage or current
Analog output resolution	16 bits
Output update rate	100 Hz divided by number of active DAC outputs
Voltage Output Mode	
Output range (software-selectable)	±10V, 0 to 10 V
Output current	±3.5 mA, typical
Power on state	0 V
Current Output Mode	
Output range	0 to 20 mA, typical
Compliance voltage range	8 - 36 V
Environmental and Mechanical	
USB cable length	3 m max
Power	Powered by USB from controller
Operating temperature	0 to 50 °C
Storage temperature	-40 to 85 °C

## **ORDERING**

Part Number Description

**OPT06020** USB-3106 analog output module with 16 voltage or current outputs

