

# SGD ADPT-420

2 Channel 4-20mA Galvanic Isolation module for PanelPilot-compatible displays



## Features

- 2.4" colour TFT screen
- Measures 4 - 20mA current loops (nom. Loop voltage 24vdc)
- 2 separate Isolated Channels
- Ideal for measuring Command and Position on the same Display
- Powered from SGD meter
- Simple Mounting on Back of PanelPilot Header
- Application download from PanelPilot website
- Works with any PanelPilot Voltage Configuration
- Operating voltage of 12V-30V d.c.
- Does not need floating PSU with respect to Current Loops
- Each Current Loop channel is isolated from each other as well as the PanelPilot



This add-on module interfaces directly with any PanelPilot compatible display. It provides dual channel 4-20mA galvanic isolation.

## Specifications

	Minimum	Typical	Maximum	Unit
<b>Resolution (internal and displayed)*</b>		0.1		%
<b>Supply voltage</b>	6	12-24	30	V d.c.
<b>Supply current**</b>	35		190	mA
<b>Number of Isolated Input Channels***</b>		2		
<b>Measurement Range (24vdc Loop Powered)</b>		4-20		mA
<b>Loop volt drop</b>	0		5.0	V

\* Depending on user calibration settings

\*\* Voltage dependent. See PanelPilot Datasheet

\*\*\* Galvanic Isolation

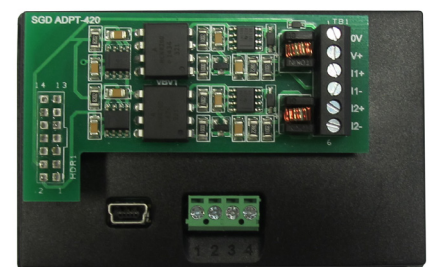
## Ordering Information

SGD ADPT-420 add-on board	SGD ADPT-420
PanelPilot-compatible displays - see PanelPilot.com	SGD 24-M SGD 28-M SGD 35-M

## Hardware

The SGD ADPT-420 board takes its power from the host SGD. Connect the 14-way connector IDC socket to the SGD, as shown below. The current loops are wired to the I1+ and I1-, I2+ & I2- via the screw terminal block.

The system can be powered via the USB port at the SGD. Do not Calibrate or Run with USB Supply as this falls outside the operating voltage range of the SGD ADPT-420.



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## Terminal Connections

Terminal connection	Description
V+	Alternative power supply input for the SGD. This passes straight to the SGD via the ribbon cable. Do not use if the power is applied directly to the V+ terminal of the SGD.
0V	Ground connection for the SGD and TC board. Connection not necessary if alarm outputs not used.
ALM1	Open-collector alarm outputs of the SGD. See the SGD data sheet for full details.
ALM2	
TC+	Positive connection for the thermocouple (Green)
TC-	Negative connection for the thermocouple (White)

## Mounting the SGD-TC

The SGD-TC should be mounted separately from the SGD display module using the two mounting holes. Take care to observe correct polarity when connecting the power supply and the thermocouple.

Please refer to the SGD data sheet for instructions on mounting the SGD to a panel.

## Dimensions

All dimensions in mm (inches)

