

# FPSI 1010-2 Dual Channel Panel Mounting LED Status Indicator

The FPSI 1010-2 consists of two channel 3-level voltage indicators. It is designed to be easily panel mounted. Each channel of the module compares an input voltage with a defined voltage window. The colour of the display shows whether the input voltage is below, within or above this window. The indicator is powered from a 7 to 24Vd.c. supply and provides a red-green-red bright LED indication over a 0 to 30Vd.c. measurement range. The user can easily set the colour switching thresholds. Hysteresis is built-in to avoid chattering at the colour switching thresholds. The module incorporates 1 trigger output per channel, allowing the user to drive external alarms or control one or two processes being monitored. A low power mode is available, whereby the module indicates the voltage level by flashing the relevant colour, instead of indicating solid colours. Connection is via screw terminals. The module features a rectangular plastic snap-in bezel, typically requiring a 24.6 x 12.4mm (0.97 x 0.49") cut-out.

## FEATURES

- Bright Red and Green Indication
- Separate 0 to 30Vd.c. Measurement Inputs
- 7 to 24Vd.c. Supply Voltage
- 2 User Programmable Thresholds per Channel
- 1 Control Output (Negative Logic) per Channel
- Snap-in Plastic Bezel
- Screw Terminal Connections
- Easy to Set up and Use



## TYPICAL APPLICATIONS

- Go - No Go Indication
- Level Monitoring
- Alarm Indication
- Control

## ORDERING INFORMATION

Standard Indicator

Stock Number  
FPSI 1010-2

## ELECTRICAL SPECIFICATIONS

Specification	Min.	Typ.	Max.	Unit
Supply voltage (V+ to 0V)	7.0		24.0*	Vd.c.
Supply current		40		mA
Input Voltage (Vin1 to 0V and Vin2 to 0V)	0		30	Vd.c.
Internal resolution (Channel 1 and Channel 2)		30		mVd.c.
Accuracy (overall error) (Channel 1 and Channel 2)		2		%
Temperature stability		100		ppm/°C
Hysteresis		2		%
Sample rate		4		Samples/sec
Operating temperature range	-30		50	°C
Input impedance (unscaled input Vin1 and Vin2)		1		kOhm
Output High Voltage (Alm1 and Alm2)	4.175		5.125	Vd.c.
Output High Current (Alm1 and Alm2)			1	mA
Output Low Voltage (Alm1 and Alm2)	0		0.6	Vd.c.
Output Low Current (Alm1 and Alm2)			1	mA

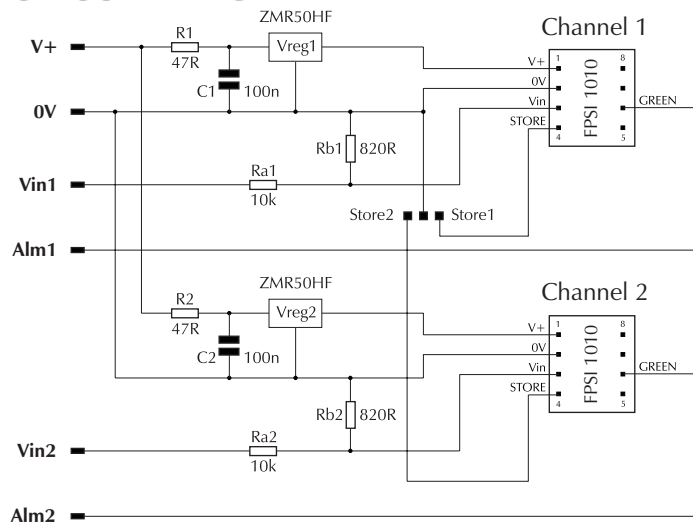
\* Operation of the indicator beyond the maximum supply voltage rating may cause permanent damage to the indicator.

## SAFETY

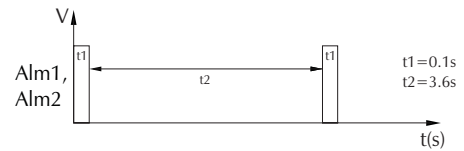
To comply with the Low Voltage Directive (LVD 93/68/EEC), input voltages to the module's terminals must not exceed 60Vdc. The user must ensure that the incorporation of the FPSI 1010-2 into the user's equipment conforms to the relevant sections of BS EN 61010 (Safety Requirements for Electrical Equipment for Measuring, Control and Laboratory Use).

# FPSI 1010-2 Dual Channel Panel Mounting LED Status Indicator

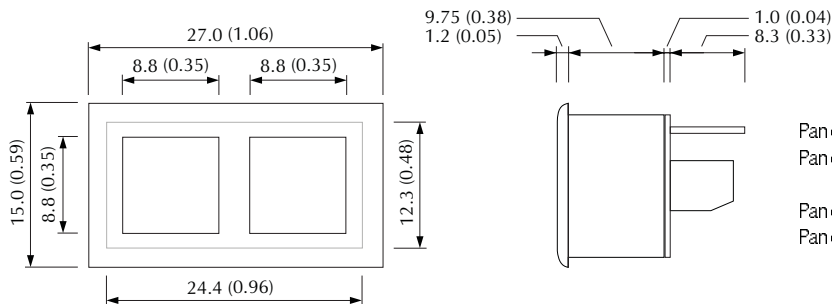
## CIRCUIT DIAGRAM



## FLASHING MODE TIMING



## DIMENSIONS All dimensions in mm (inches)

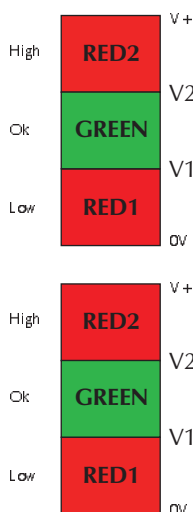


Panel thickness: 1 (0.04)  
Panel cut-out: 12.4 x 24.4mm (0.49 x 0.96)

Panel thickness: 3 (0.12)  
Panel cut-out: 12.4 x 24.6mm (0.49 x 0.97)

## CONFIGURING THE LEVEL INDICATOR

Each channel of the FPSI 1010-2 is factory configured with colour switching thresholds, as follows: V1 = 11.0V (nom.) V2 = 22.0V (nom.)  
To change these settings, proceed as follows for each channel.



### Step 1

- Remove the Store jumper link.
- Connect the V+ and 0V terminals of the FPSI 1010-2 to a 7.0 to 24.0Vd.c. supply.

### Step 2

- Apply the first desired voltage (V1) to Vin1.
- Enable the Store1 jumper link.
- Remove and park the Store jumper link.
- The module flashes Green to indicate that the V1 level has been stored.

### Step 3

- Apply the second desired voltage (V2) to Vin1.
- Enable the Store1 jumper link.
- Remove and park the Store jumper link.
- The module displays Red to indicate that the V2 level has been stored.

### Step 4

- To enter solid LED mode, make sure Vin does not change.
- To enter flashing LED mode, change Vin by 600mV or more.
- Place the Store jumper link over the 2 pins.
- Remove and park the Store jumper link.
- Module flashes Red or Green to indicate that the LED mode has been stored.

### Step 5

- Repeat steps 2 and 3, this time using Vin2 and Store2 instead of Vin1 and Store1.

### Step 6

- Disconnect the module. The module is now ready for use.



Store jumper link parked



Store1 enabled



Store2 enabled