

PRODUCT DESCRIPTION

The FPSI 1010 uses the latest miniaturisation techniques to produce a very compact voltage level indicator. The module compares an input voltage to a defined voltage window. The colour of the display shows whether the input voltage is below, within or above this window. The indicator provides a red-green-red bright LED indication over a 0 to 2.5V or 0 to 5V input voltage range. The user can easily set the colour switching thresholds (an optional programmer is available - FPSI 1010 PROG). Hysteresis is included to avoid chattering at the colour switching thresholds. The module incorporates three outputs, one for each colour level, allowing the user to drive external alarms or to control the process being monitored. A low power mode is also available, whereby the module indicates the voltage level by flashing the relevant colour, instead of indicating solid colours. Connection to the 10x10mm module is via 8-way DIL pins. This unique product is designed to be a drop-in component in most medium and high volume applications, ranging from personal instrumentation and integral sensor indicators to control panel status displays. This module is supplied with a plastic mounting bezel, requiring a 12.6 x 12.6mm (0.5x0.5") cut-out.

FEATURES

- Bright Red and Green Indication
- 0 to 2.5Vd.c. and 0 to 5.0Vd.c. Measurement Ranges
- 2 User Programmable Thresholds
- 5V d.c. Supply Voltage
- Low Power Mode
- Easy to Set up and Use
- 8-Pin DIL Package
- Module can be customised on request



TYPICAL APPLICATIONS

- Go - No Go Indication
- Level Monitoring
- Alarm Indication
- Process Control
- Automated Test Equipment

ORDERING INFORMATION

Standard Indicator	Stock Number FPSI 1010
Programmer	FPSI 1010 PROG

ELECTRICAL SPECIFICATIONS

Specification	Min.	Typ.	Max.	Unit
Supply voltage (V+ to 0V)	4.75	5	5.5*	V d.c.
Supply current	Display not flashing	15		mA
	Display flashing (average current)		2.5	mA
Input Voltage (Vin to 0V)	Vref not connected	0	2.5	Vd.c.
	Vref connected to +5.0V	0	5.0	Vd.c.
Internal resolution	Vref not connected	2.5		mV
	Vref connected to +5.0V		5.0	mV
Accuracy (overall error)		0.4		%
Temperature stability		100		ppm/°C
Hysteresis		2		%
Sample rate		4		Samples/sec
Operating temperature range	-30		+70	°C
Input impedance		1		kOhm
Output High Voltage (pins 5, 6, 7)	V+ - 0.7		V+	V d.c.
Output High Current (pins 5, 6, 7)			1	mA
Output Low Voltage (pins 5, 6, 7)	0		0.6	V d.c.
Output Low Current (pins 5, 6, 7)			1	mA

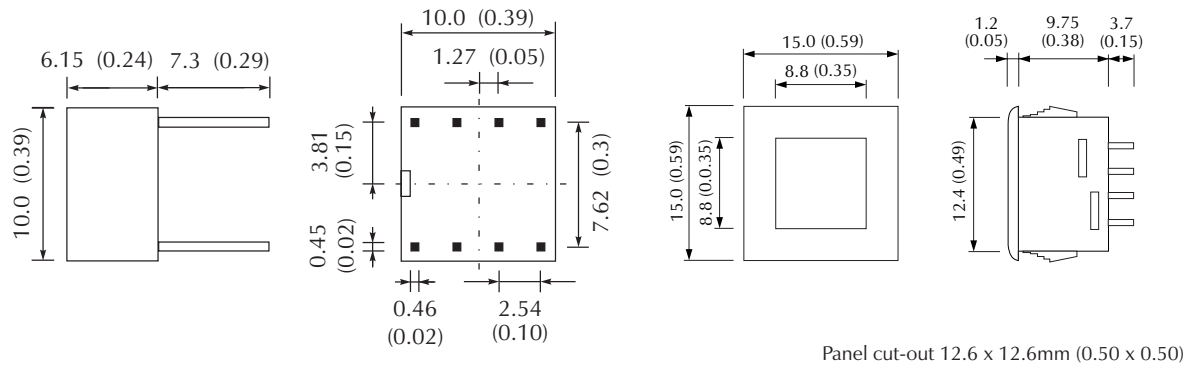
* Operation of the indicator beyond the maximum supply voltage rating may cause permanent damage to the indicator.

SAFETY

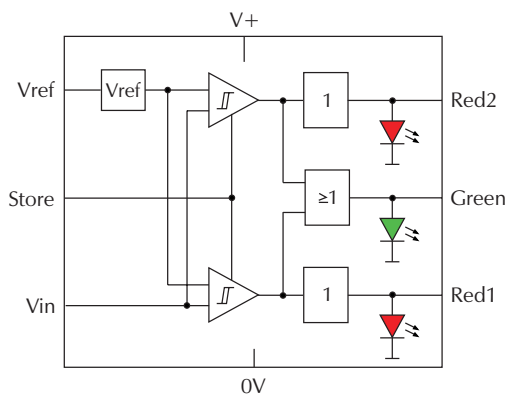
To comply with the Low Voltage Directive (LVD 93/68/EEC), input voltages to the module's pins must not exceed 60Vdc. The user must ensure that the incorporation of the panel meter into the user's equipment conforms to the relevant sections of BS EN 61010 (Safety Requirements for Electrical Equipment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

DIMENSIONS

All dimensions in mm (inches)



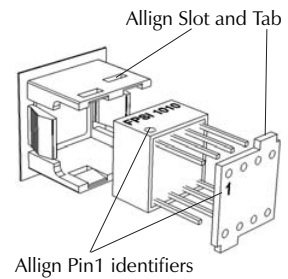
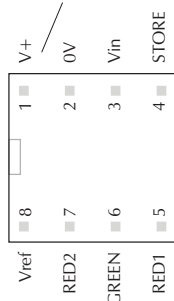
FUNCTIONAL BLOCK DIAGRAM



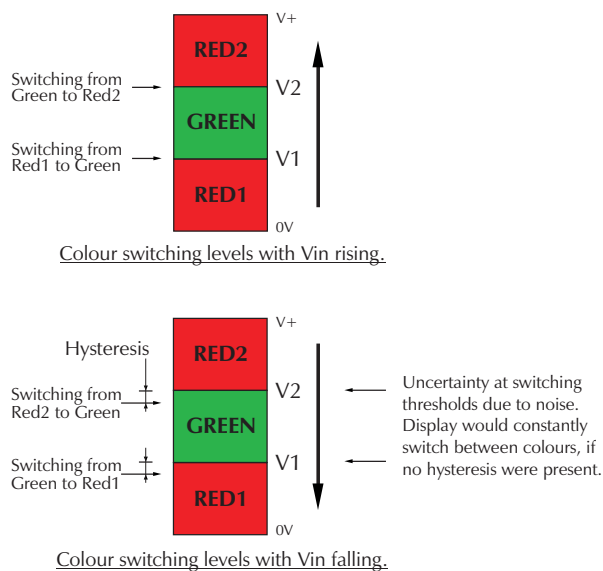
PIN CONFIGURATION

(bottom view)

White dot on side of module identifies Pin1



HYSTERESIS



Hysteresis is built into the FPSI 1010. It cannot be switched off.

FLASHING MODE TIMING

