

# 222 AND 224 GP8

## Two and Four Channel Detector Modules

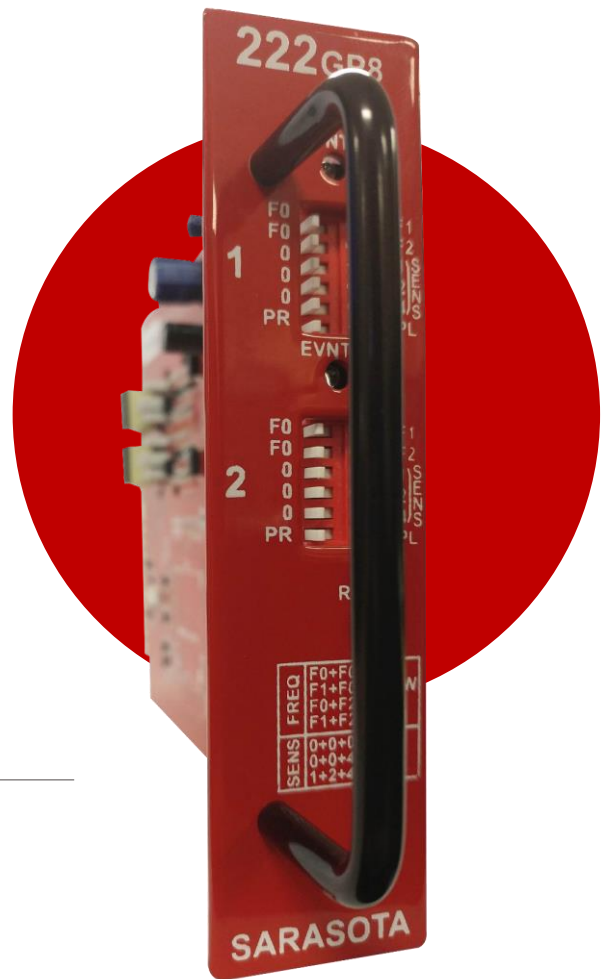
Oriux's GP8 detectors allows you to optimize the detector's performance parameters for the most demanding detector application intersection control. For any application, the Oriux's GP8 detectors identifies loop events such as open loops, shorted loops or loops with excessive inductance changes. The event LED, using special flash rates, identifies the condition of loop fault, whether present or historical. This is the standard operation for intersection control where reliability is the major concern.

Designed especially for intersection control where crosstalk must be eliminated, the Oriux's GP8 detectors provides four different front panel selectable frequencies. In addition the Oriux's GP8 detectors also functions as a scanning detector, further reducing the possibility of crosstalk between two loops connected to the same detector.

Fast, predictable and consistent response times facilitate accurate speed and occupancy measurements. This level of performance is increasingly important for IVHS applications. Simple set-up is also a key feature of the Oriux's GP8 detectors. Front panel frequency, sensitivity and mode switches allow the user to simply plug the unit in, adjust switches to desired positions and walk away.

## Features & Benefits

- Optimized for intersection detection
- Excellent noise filtering
- Four frequency settings to eliminate crosstalk
- Pulse or presence modes per channel
- Sensitivity boost to hold small and high vehicles
- Fault LED to indicate present and historical loop faults
- Seven sensitivity levels per channel
- Sequentially scanned loops
- Quick, simple set-up



PN: 82-2039-01

# Specifications

<b>Operating Modes</b>	Two modes of operation are available via a mode selection switch, Pulse (PLS) and Presence (PR).		
<b>Presence</b>	Presence times of 16, 60, 120 minutes or permanent are available by setting the on board switch. Optional: any presence time value can be set from 1 to 127 minutes in 1 second increments.		
<b>Pulse</b>	In pulse mode, a momentary output 125ms +/- 25ms (optional 250ms ± 30ms) is provided on vehicle entry. If the vehicle remains in the loop, a maximum of 3 seconds pulse paralysis time is provided before additional vehicles are detected.		
<b>Frequency</b>	F1F2 mode: 80 to 2400 µH nominal F0F2 mode: 50 to 1700 µH nominal F1F0 mode: 30 to 1200 µH nominal F0F0 mode: 20 to 700 µH nominal		
<b>Sensitivity</b>	Seven levels of sensitivity can be selected by DIP switch as follows:		
	7	1+2+4 = 0.01%	
	6	0+2+4 = 0.02%	
	5	1+0+4 = 0.04%	
	4	0+0+4 = 0.08%	
	3	1+2+0 = 0.16%	
	2	0+2+0 = 0.32%	
	1	1+0+0 = 0.64%	
	0	0+0+0 = Channel Off	
<b>Response Times</b>	Channel X	Other Channel	Resoonse Times
	.01 to .02%	.01 to .02%	35ms +/- 4ms
	.04 to .16%	.04 & above	20ms +/- 2ms
	.16 & Above	.04 & above	5ms +/- 1ms

<b>Requirements</b>	10.8 to 30 VDC. Maximum permissible RMS ripple = 700 mV.
<b>Outputs</b>	Solid State optically-isolated NPN Transistor VCE ON voltage +1.2 VDC @ 50mA. This output conducts a maximum of 500 µA in the OFF state at a collectoremitter voltage of +40 VDC
<b>Failsafe Output</b>	A DETECT Output Is given when the detector power supply fails. (Failsafe 1s default)
<b>Input Supply Current</b>	For each Detector Module: Nominal Current, normal operation 80mA Maximum, with shorted loop-inputs = 90mA
<b>Inductance Range</b>	20 to 2400 µH, automatically tuned
<b>Lightning Protection</b>	Meets or exceeds NEMA
<b>Temperature Range</b>	-40°F to +176°F (-40°C to +80°C)

**22 pin card edge connector, mates with Cinch Jones 50-44A-30M**

Pin	Function	Pin	Function
A	DC common (-)	N	Not used
B	DC 24V (+)	P	Not used
C	Reset	R	Not used
D	Ch. 1loopinput (+)	S	Not used
E	Ch. 1loopinput (-)	T	Not used
F	Ch. 1outputcollector (+)	U	Not used
H	Ch. 1outputemitter (-)	V	Not used
J	Ch. 2loopinput (+)	W	Ch. 2output collector (+)
K	Ch. 2loopinput (-)	X	Ch. 2output emitter (-)
L	Chassis ground	Y	Not used
M	Not used	Z	Not used
1	Not used	12	Not used
2	Not used	13	Not used
3	Not used	14	Not used
4	Not used	15	Not used
5	Not used	16	Not used
6	Not used	17	Not used
7	Channel 1 Status Output	18	Not used
8	Not used	19	Not used
9	Not used	20	Channel 2 Status Output
10	Not used	21	Not used
11	Not used	22	Not used