

Product Overview

Panterra is a class of intelligent gas detectors supporting a variety of sensing chemistries and technologies. Subclasses are differentiated by sensor type and are selected according to application requirements and target sensing environments (including anaerobic and zero humidity conditions). Supported sensor types include thermal conductivity, metal-oxide semiconductor (MOS), and electrochemical.

Standard devices are offered in the *Knowz™ / PowerKnowz™* form factor (2.5" x 2.0" x 1.0") with or without extended sensors (1.0" x 1.0" x 1.0" head, up to 25' cable). Custom form factors, connector types and mounting provisions are available by special order.

Power consumption varies according to sensor type from 100mW to 1W. Input powering options are 5VDC (regulated) or 7-40VDC / 7-60VDC (unregulated).

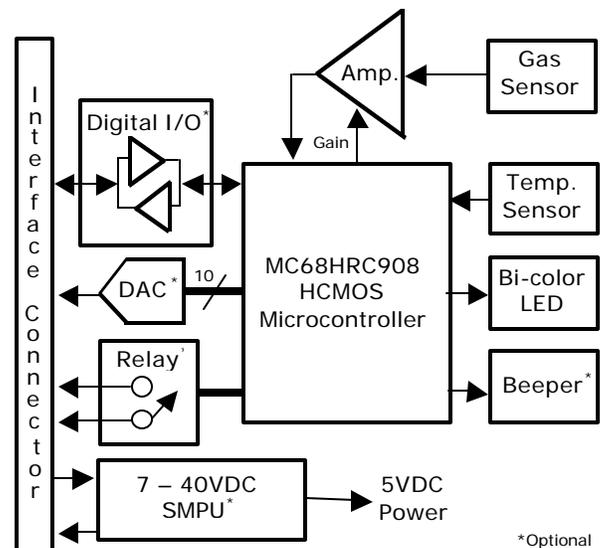
All subclasses are rated non-incendiary.

For more information on specific subclasses please see the *Panterra* product briefs in the support section of neosafe.com or contact Neodym toll-free at 1-877-723-5400.

FEATURES

- Support for a variety of sensor types
- 10-bit auto-ranging sensor sampling system
- Normal, Warning, Alarm & Error states
- Bi-color LED status indicator
- Optional NO or NC dry relay
- Auto-resetting or latching operation
- Optional 0-to-5V proportional output (8 / 10 bit)
- Optional binary operation (TTL output)
- Optional voltage encoded state output (analog)
- Optional alarm beeper
- *PK-Port™* compatible digital communications
- User-settable alarm/warning via *PK-Port™*
- Digital FLASH-based calibration
- Each device factory pre-calibrated
- Field re-programmable firmware
- Active temperature compensation (as required)
- Sensor & temperature error detection
- Optional extendable sensor head
- 5VDC, 7-40VDC or 7-60VDC input power
- 500 mW operating power (typical)

BLOCK DIAGRAM



MATRIX OF RELATIVE SENSOR STRENGTHS

SENSOR TYPE: PARAMETER	MOS	Thermal conductivity	Electro-chemical
Low cost	YES		
Long life	YES	YES	YES
Gas specific			YES
Trace gas detection	YES		
Safety applications			YES
High conc. detection		YES	
Anaerobic sensing		YES	
0% R.H. sensing		YES	
Silicone resistant		YES	YES
High concentration resistant		YES	

PRODUCT AVAILABILITY

Sensor Class	Target Gas	Part No.	Range	Status	Lead time
MOS (Metal oxide)	Hydrogen (trace)	PN-SM-GHT	0-1,000 PPM	Avail.	1 week
	Methane (trace)	PN-SM-GMT	0-1,000 PPM	Avail.	1 week
TCOND (Thermal Conductivity)	Hydrogen	PN-ST-GHY	0-100% vol.	Avail.	1-4 weeks
	Helium	PN-ST-GHE	0-100% vol.	Avail.	1-4 weeks
ECHEM (Electrochemical)	Oxygen	PN-SE-GOX	0-30% vol.	Avail.	1 week