

# INDUSTRIAL REFRIGERATION SOLUTIONS

AMMONIA AND CO<sub>2</sub> GAS DETECTION  
ENVIRONMENTAL MONITORING  
ENERGY MONITORING



# MGS-400 SERIES GAS DETECTORS

DIGITAL NH<sub>3</sub> & CO<sub>2</sub> DETECTION EASILY INTEGRATED INTO NEW AND RETROFIT APPLICATIONS



**Extreme Temperature Range**  
-40° to 122°F (-40° to 50°C)



**On-Board AV Alarms**  
Visual and audible alarm systems



**Minimal Wiring**  
Reduce wiring by up to 90% with digital modbus



**Easy 1-Person Calibration**  
Calibrate with our mobile app, or use pre-calibrated sensors



**Mobile App**  
Configuration, calibration, and reporting



**Flexible Connectivity**  
Local relays, MODBUS communications, and analog output



**On-Site Reporting**  
PDF calibration reports



**Durable Waterproof Design**  
IP66 rated enclosures

GAS	SENSOR RANGES
NH <sub>3</sub>	0-100,300,1000,5000 ppm 0-100% LEL, 0-3% VOL
CO <sub>2</sub>	0-5K,10K, 20K, 30K, 50K ppm
HFCs / HFOs	0-1000 ppm
Hydrocarbons	0-2500, 5000 PPM, 0-100% LEL
O <sub>2</sub>	0-30% VOL

MGS-410



MGS-450



MGS-460

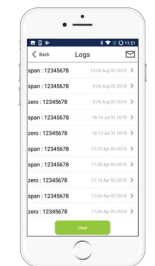
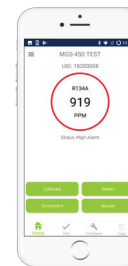
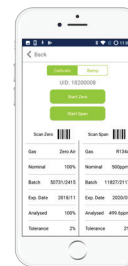
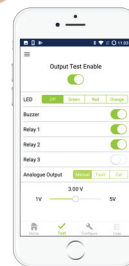


MGS-550



## MGS-400 MOBILE APP

- Configuration** (Rename device, define alarm thresholds, adjust Modbus settings configure relay behavior and manage analog output settings).
- Maintenance** (Test LED / buzzer function, relays, and analog output level).
- Calibration** (View sensor type, serial number and "Calibration Due" timer and initiate zero / span calibrations with customizable field calibration certificate).
- Intuitive Interface** (View current gas measurement and acknowledge alarm / fault status).



## EASILY INTEGRATES WITH ANY REFRIGERATION CONTROL SYSTEM

	MGS-410	MGS-450	MGS-460	MGS-550
Enclosure	IP66	IP66 or IP41	IP66	IP66
Relays	-	3	3	3
Communication	Modbus	Modbus	Modbus	Modbus
Output	-	Analog	Analog	Analog
Sensor	Integrated	Integrated	Remote	Local / Remote
Interface	Mobile App	Mobile App	Mobile App	Buttons / Display

# SAMPLING GAS MONITORS

NON-DEPLETING IR SENSOR PROVIDES RELIABLE, LONG-LIFE GAS DETECTION

## PPM, %LEL, AND VENT LINE MONITOR

### SINGLE-ZONE (1 PORT)

- Continuous PPM and %LEL measurement in a single device
- Indoor-mounted vent line monitoring
- 3 alarm level relay and 4-20mA signal
- Non-depleting, long-life infrared sensor
- Compliant with IIAR standards



## MONITOR MULTIPLE POINTS WITH A SINGLE SYSTEM

### MULTI-ZONE (4 - 16 PORTS)

- Identify leaks sooner with multiple close proximity sample points
- 3 alarm levels per channel, Modbus, and 4-20mA signal
- Non-depleting, long-life infrared sensor
- Connected remote monitoring and alerting
- Compliant with IIAR standards



**Extreme Temperature Range**  
-50 to 120F Sampling Environment



**Continuous Calibration**



**Gas Library of 60+ Refrigerants**



**Over-Range Recovery**  
(No replacement)



**0 to 10,000 ppm Detection Range**  
HFCs: 0-10K | NH3: 10-10K | CO2: 300-8K



**Up to 10 year Sensor Life**

# CONTROL AND MONITORING SYSTEMS

LOCAL CONTROL AND ALARMING, AND REMOTE MONITORING



**8-CHANNEL CONTROLLER**  
MGS-408



**2-CHANNEL CONTROLLER**  
MGS-402 (IP66, -40°C)



**IOT GATEWAY**  
MODBUS / LORA



**4-CHANNEL ENTRANCE MONITOR**  
MGS-401 (IP66, -20°C)



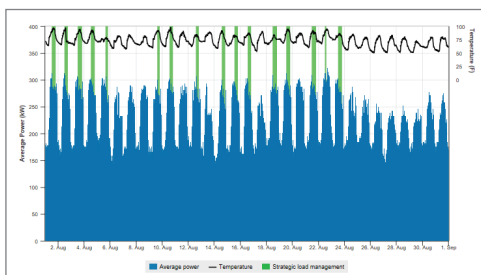
**ENTERPRISE IOT DATA & ANALYTICS**  
PARASENSE SOFTWARE



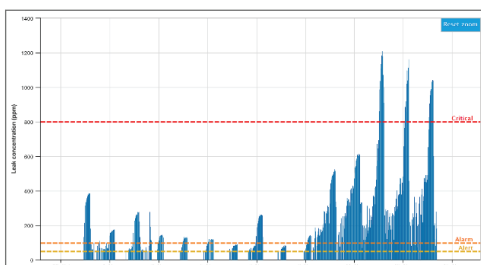
**PROFESSIONAL SERVICES**  
MONITORING, INSTALLATION,  
SERVICE

## CONNECTED SOLUTIONS MONITORING

Remote monitoring, alarms, and data analytics for optimal refrigeration performance across multiple assets and sites.



**ENERGY MANAGEMENT**



**LEAK DETECTION**

## ACCESSORIES



**Temperature / Humidity Sensor**



**Horns / Strobes**



**Calibration Gas**