# MACURCO™
## Building & Home Solutions

Whether you are looking for gas detection for a security system, building automation or HVAC system, for personal safety or for monitoring specific gases in potentially hazardous environments, Macurco has a gas detector to meet your needs.


Macurco AireShield


AireShield Remote Housing

# AIRESHIELD
## Refrigerant Monitor

The Macurco AireShield is your all-in-one solution for advanced refrigerant detection, offering unmatched flexibility across a wide range of applications. Powered by cutting-edge NDIR sensor technology with built-in temperature compensation, it delivers industry-leading accuracy while dramatically reducing false alarms - outperforming older technologies like MOS sensors known for high error rates and constant maintenance. With a long sensor lifespan and low cost of ownership, the AireShield is designed to go the distance without compromising performance. It not only meets but exceeds regulatory codes and compliance standards. Installation, commissioning, and maintenance are fast and effortless thanks to smart sensor integration, which delivers real-time diagnostics and a full suite of user alerts.

## Key Features

- NEMA4X/IP65 enclosure
- Field replaceable smart sensor
- Optional buzzer
- Event logging
- User selectable settings (Default to industry standards) via four-button interface
- Analog/digital output options
- 5 A SPDT and 0.5A relays to control fans, valves, louvers, horns and strobes
- Colored notification LED – (Alarm, Warning, Trouble, Calibration, Bluetooth Connection)
- Intuitive calibration process
- Remote Sensor (up to 2 per transmitter)

## Applications

- Chiller rooms
- Walk-in coolers
- Mechanical rooms
- Food retail
- Cold storage
- Process cooling
- Food & beverage
- Industrial refrigeration
- Ice rinks
- Ships

**Macurco™**
Building & Home Solutions

## Specifications

| | |
|---|---|
| Size | 8.25" x 2 5/8" x 5 3/4 |
| Weight | 1 lb. |
| Voltage | 12-24VAC, 12-32VDC |
| Current draw | 4.08 W (max) from 12 to 24 VAC or 12 to 32 VDC (See Manual for Current Draw on Various Configurations) |
| Signal | Analog 4-20mA, 0-20mA Digital: Modbus RTU |
| Sensor Type | NDIR Smart |
| Resolution | Sensor Specific - Refer to AireShield Sensor Guide |
| Sensor Range | Sensor Specific - Refer to AireShield Sensor Guide |
| Alarm Levels | Industry Default / User Adjustable / Sensor Specific (See User Manual) |
| Relays | 5 A SPDT and 0.5A |
| Optional Buzzer | >90 dBA at 10ft |
| Visual Indicator | RGB LED's |
| Operating Temperature | Sensor Specific - Refer to AireShield Sensor Guide |
| Ambient Humidity | 0-95% RH non-condensing |
| Life Expectancy | Refer to AireShield Sensor Guide |
| Warranty | Two year limited warranty |

*Please read manual for more specifications

## Accessories

| Name | Model Number |
|---|---|
| Control Panels | DVP-120M, DVP-120B, DVP-1200 |
| Horn and Strobe | HS-X (X = color) Amber (A), Blue (B), Clear (C), Green (G), Red (R) |
| Strobe Only | MSG-X (X = color) Amber (A), Blue (B), Clear (C), Green (G), Red (R) |
| Horn Only | MHG |
| Step-down Transformers | PS-24, PS-24-H, MAC6AMP, MAC10AMP |
| Calibration Kits | Based on Gas Type |
| Replacement Sensor | Based on Gas Type |
| Remote Sensor | AireShield Remote |

Control Panels

Power Supply

Calibration Kits

Remote Sensor

Horn and Strobe

Emergency Power Off

On/Auto Switch

## HOW TO ORDER

**Series =** AireShield (AS)

**Communication Type =** Analog / Digital

**Sensor Configurator =** No Remote / Single Remote / Dual Remote

**Gas Type =** R-22, R-32, R-125, R-134a, R-143a, R-227ea, R-290, R-404A, R-407A, R-407C, R-407F, R-410A, R-417A, R-422A, R-422D, R-424A, R-427A, R-434A, R-438A, R-442A, R-448A, R-449A, R-450A, R-452A, R-452B, R-453A, R-454A, R-454B, R-454C, R-455A, R-507, R-513A, R-600, R-717, R-744, R-1233zd, R-1234yf, R-1234ze, $SF_6$

**Buzzer =** Buzzer / No Buzzer

**AireShield Ordering and Sensor Guide**

**Scan QR to build part number.**

ISO 9001:2015 CERTIFIED

**Macurco Inc.**
Sioux Falls, South Dakota     **Phone:** 1-877-367-7891     **Website:** www.macurco.com     **Email:** info@macurco.com