



Chillgard® 5000

Ammonia Monitor



**SAFEGUARDING PEOPLE,
PLACES & THE PLANET.**

➤ Ammonia Monitoring in Industrial Processing

Hazards of Ammonia Gas Leaks

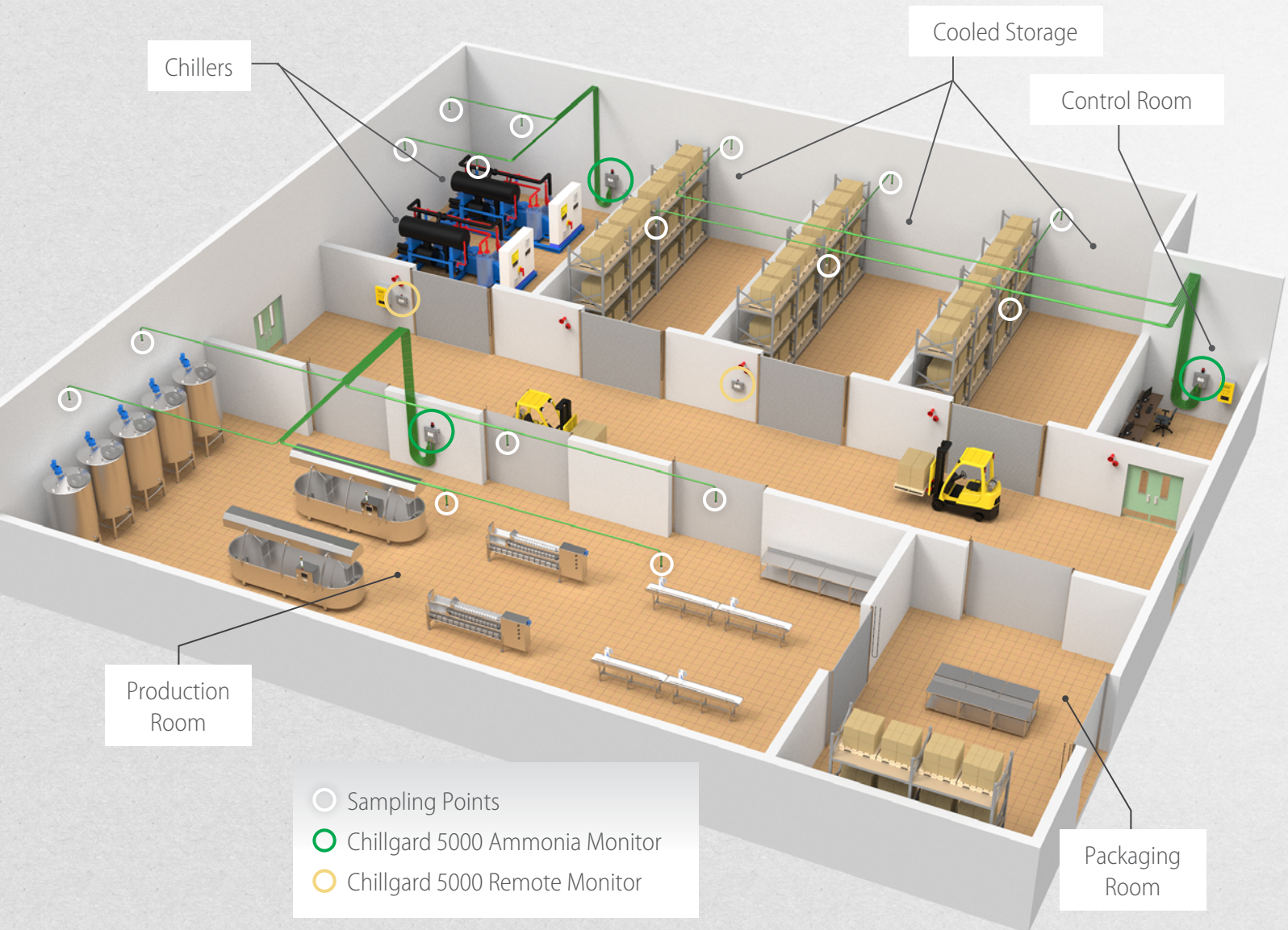
While ammonia refrigeration has long been a standard in the food/beverage industry, it is also now found in pharmaceuticals production, in air-conditioning equipment and in electric power generation plants. Ammonia is a toxic gas, and the proper safety monitoring procedures and equipment must always be in place to avoid serious accidental injury or death.

Ammonia refrigeration is considered cost efficient and has been credited with keeping the price of food at affordable levels. Also, it does not destroy the ozone layer or contribute to the greenhouse effect linked to global warming.

When installed and maintained properly, with appropriate safety equipment and procedures in place, ammonia refrigeration is generally considered safe. The accidental release of pressurized ammonia from refrigeration systems can injure workers, damage plant equipment, and potentially affect the general public outside the plant environment.

Reliable ammonia detection ensures both personnel safety and product quality. The Chillgard 5000 Ammonia Monitor protects equipment and people due to its stable and selective sensing technology.

Stay in with compliance with EN 378 (Europe) and ANSI/IRAR Standard 1-2017 (US).





Intuitive User Interface

7" (178 mm) touch display with easy access to settings, event log and diagnostics

Sensitivity

10 ppm minimum detection level with Photoacoustic Infrared (PAIR) technology

Work Smarter

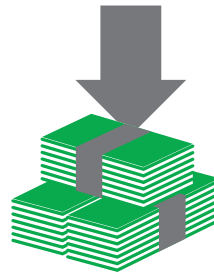
Predictive Maintenance diagnoses early on performance to keep your facility safe

Lower Cost of Ownership

One dedicated calibration port for maximum of 16 points reduces your maintenance costs



Chillgard 5000 Ammonia Monitor Advantages



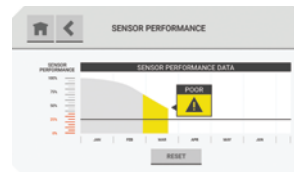
Key Cost of Ownership

- Long sensor life (due to PAIR technology)
- Single calibration port for up to 16 points
- Direct communication to Building Management System (via BACnet or Modbus)



Stability

- Not affected by temperature and humidity swings
- Minimizes drift
- Immunity to interferants such as cleaning agents and solvents
- Operates for months with virtually no zero drift



Work Smarter with Predictive Maintenance

The diagnosis settings tell you in advance about the performance of the system (sensor, pump, flow system)



Specifications	
USAGE	Indoor use only
OVERVOLTAGE	Category II
POLLUTION	Degree 2
AC POWER	100–240 Vac, 50/60 Hz, 200 VA
OPERATING TEMPERATURE	32° to 122° F (0° to 50° C)
OPERATING ALTITUDE LIMIT	9762 ft. (2975 m)
OPERATING HUMIDITY	0 to 95%, non-condensing
INGRESS PROTECTION	IP54
DIMENSIONS	15.6 in. x 13.6 in. x 7.6 in. (39.6 cm x 34.5 cm x 19.3 cm) H x W x D
WEIGHT	
4-POINT UNIT	14 lb. (6.4 kg)
8-POINT UNIT	15 lb. (6.8 kg)
16-POINT UNIT	17 lb. (7.7 kg)
SENSOR TYPE	Photoacoustic Infrared (PAIR)
SAMPLE LINE TUBING	FEP-lined tubing
SAMPLE LINE MONITORING DISTANCE	Up to 400 ft. (121 m) for optimum performance, will support up to 1250 ft. (381 m)
GASES	Ammonia (NH ₃)
MEASURING RANGE	0 – 1000 ppm
SENSITIVITY (MIN DETECTION)	10 ppm Ammonia
ACCURACY (LINEARITY)	0–50 ppm ±1 ppm, 51–1000 ppm ±10% of reading
SENSOR RESPONSE TIME	90% of gas reading <60 sec
RELAYS	5 Form C, 8A 250 VAC/24 VDC resistive SPDT for Fault, Caution Level, Warning Level, Alarm Level and External Horn
AUDIBLE ALARM	95 ±5 dB(A) at 24 in. (61 cm) maximum
COMMUNICATION OUTPUTS	4–20 mA sourcing, 250 Ohm load; 0 – 10 V , 2 K Ohm minimum load; RS485 Modbus RTU; RS-485 BACnet MS/TP
WARRANTY	2 years
APPROVALS	UL 61010-1 (3rd Edition) CAN/CSA-C22 No. 61010-1-2012 IEC/EN 61010-1:2010 (3rd Edition)

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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