



COOLING SYSTEMS



Among the dangers found in refrigeration systems are flammable gases from which an explosive gas-air mixture can emerge. Also the odour-free, toxic carbon dioxide is very dangerous in high concentrations. Depending on the system, the possible dangers must be mitigated appropriately to ensure the complete safety of the system.

INOSENT RECOMMENDS THE «**EASY**» PRODUCT LINE FOR SMALL REFRIGERATION PLANTS.

Easy is a simple, high-quality, compact solution for small systems that can be easily installed by the customer. The gas detection system is delivered pre-calibrated for different refrigerants and, if required, pre-programmed for the normal alarm levels.

THE COMPACT CLASSIC FOR REFRIGERATION SYSTEMS: THE «EASY» PRODUCT LINE

- STANDALONE GAS DETECTORS FOR MONITORING (H)FKW, HFO, C₃H₈ AND CO₂
- LED-LIGHT WITH INTEGRATED ALARM HORN
- FLASHING LIGHT
- ALARM HORN



INOSENT has two options in its range of products that meet the requirements of a refrigeration system. The EASY product line is ideal for small refrigeration systems, while the ULTIMATE product line can give a better overview for larger, more complicated solutions.

INOSENT RECOMMENDS THE «**ULTIMATE**» PRODUCT LINE FOR LARGE REFRIGERATION PLANTS.

This comprehensive, technically sophisticated solution provides a quick, easily understandable visualisation of all events and measured data; there is an overview of the connected detectors on the integrated 7-inch screen, or a single view showing concentration levels over time. Logging of gas concentration levels, alarms and malfunctions, as well as a web server and a MODBUS output for communication with the building control system, are all integrated into the system. Other plus points: the BUS wiring of the gas detectors and LED visual alarms offers large cost savings.

THE IDEAL SOLUTION FOR COOLING SYSTEMS: THE «ULTIMATE» PRODUCT LINE:

- RELIABLE MONITORING OF (H)FKW, HFO, PROPANE, CARBON DIOXIDE AND AMMONIA
- «ULTIMATE» CONTROL PANEL
- GAS DETECTORS FOR MONITORING (H)FKW, HFO, C₃H₈ AND CO₂ AND NH₃; OTHER DETECTORS CAN BE CONNECTED
- LED LAMP
- FLASHING LIGHT
- ALARM HORN





ULTIMATE

The Ultimate product line has been designed specifically for monitoring the concentration of gases. The gas monitor has an integrated 7-inch touch screen for the graphical display, for operation and for programming. In addition, logging of gas concentration levels, alarms and malfunctions, as well as a web server and a MODBUS RTU output for communication with the building control system, are all integrated into the Ultimate system.



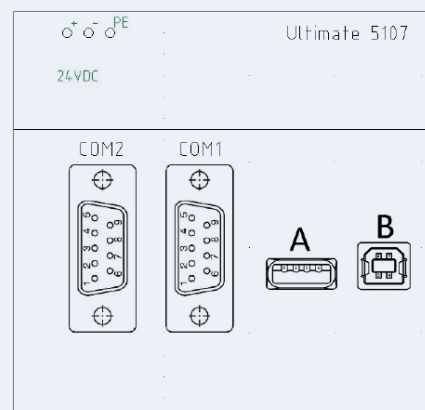
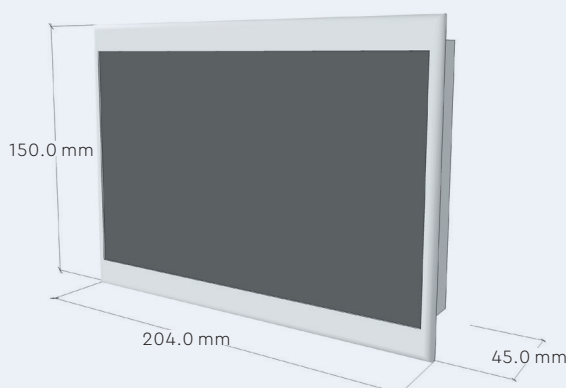
OVERVIEW:

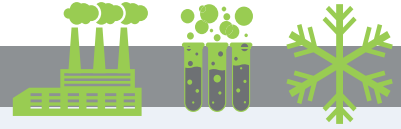
- 2 YEARS WARRANTY
- PRACTICAL BUILT-IN INSTALLATION
- 7-INCH TOUCH-SCREEN DISPLAY (ALSO AVAILABLE IN OTHER SIZES)
- ADDITIONAL TOUCH DISPLAYS CAN BE CONNECTED ON THE SAME BUS
- SIMPLE PROGRAMMING DIRECTLY ON THE TOUCH-SCREEN
- UP TO 255 BUS COMPONENTS
- EMBEDDED WEB SERVER (TYPE ULTIMATE 5207)
- INTEGRATED LOGGING OF GAS CONCENTRATIONS, ALARMS AND MALFUNCTIONS
- DISPLAY OF MEASURING RANGES, ALARM LEVELS AND ALARM GROUPS
- MAK VALUE MODE FOR NATIONAL DIRECTIVE-COMPLIANT LABORATORY MONITORINGS

TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE: 24 VDC | Status display for operation and malfunctions on a well-organised colour display | 2 x USB ports for download of history and upload of system maps | 1 x RJ-45 connector for the web viewer | **DIGITAL SIGNAL INPUT:** 255 x digital via 2 x RS485 bus ports | 8 external relay contacts on the expansion module | 8x4-20mA analogue signal inputs on the expansion module | **AVAILABLE ACCESSORIES:** Modbus-enabled LED alarm light with integrated horn, Expansion modules for additional relay outputs or analogue inputs

DIMENSIONS AND CONNECTIONS





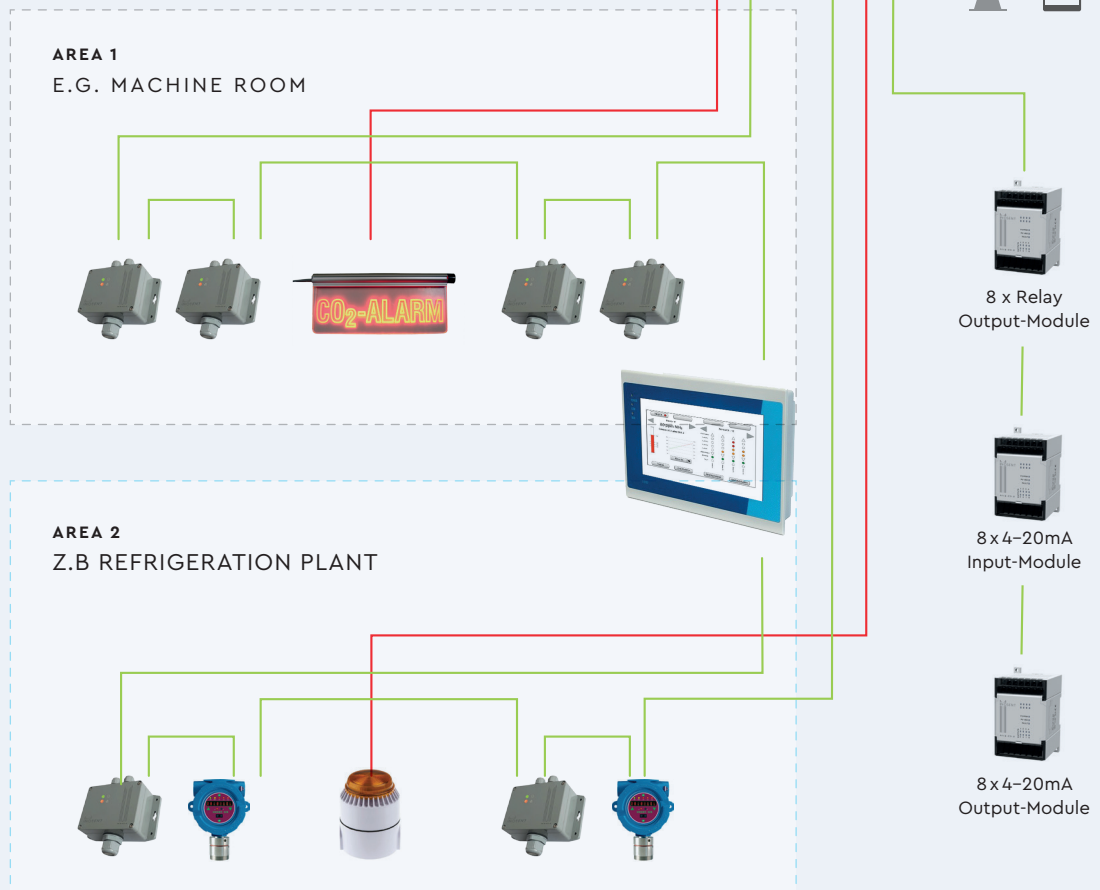
INOSENT ULTIMATE WITHOUT DIGITAL ALARM UNITS

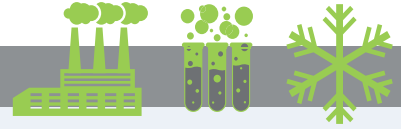
SIGNAL:
MODBUS

MAX. QUANTITY GAS DETECTORS:
255



- SUPPLY TO ALARM UNITS
24 VDC or 230 VAC
- SUPPLY TO GAS DETECTORS:
INOSENT MODBUS-CABLE LI HCH:
Cable 2 × 2x0,8 mm², shielded, coloured,
max. 1200 m
- ETHERNET-CONNECTION:
8-pin RJ45, 10/100 Mbps, Auto MDI/MDIX,
Auto-Negation





INOSENT ULTIMATE WITH DIGITAL ALARM UNITS

SIGNAL:
MODBUS

MAX. QUANTITY GAS DETECTORS:
255



— SUPPLY TO GAS DETECTORS AND ALARM UNITS:
INOSENT MODBUS-CABLE LI HCH:
Cable $2 \times 2 \times 0,8 \text{ mm}^2$, shielded, coloured,
max. 1200 m

— ETHERNET-CONNECTION:
8-pin RJ45, 10/100 Mbps, Auto MDI/MDIX,
Auto-Negation

