



GTC-100

SMART CONTROLLER

The GTC-100 is a versatile gas detection controller designed for centralized monitoring of fixed gas detection systems. It provides clear visibility and scalable monitoring across industrial applications.

Combining multi-channel monitoring, a 10.1-inch touchscreen, location monitoring, data logging, and flexible outputs, the GTC-100 provides reliable and efficient gas detection control.

Features and Benefits



Multi-Channel Gas Monitoring

Monitor up to 10 gas detector channels with the base unit, with capacity expandable to 20 channels using an expansion unit. This provides a scalable solution for larger monitoring installations.



Touchscreen Interface

A 10.1-inch touchscreen provides a clear and intuitive interface for monitoring system status and alarms. Multi-language support in English, Korean, and Chinese allows flexible deployment across different sites.



Built-In Data Logging

Event and measurement data are stored in the controller's internal memory for easy review. This provides a convenient record of system activity and alarm events.



Integrated Location Monitoring

The system incorporates gas detector location monitoring, allowing detector information to be managed directly through the receiver. This helps operators quickly identify the location associated with a gas detection event.



Flexible Output Configuration

Modular output options support individual relay and 4–20 mA functions, providing flexibility when integrating the controller with external systems. TCP/IP and MODBUS interfaces are also available for system connectivity.



Audible & Visual Alarm Indication

The controller provides a 90 dB audible alarm along with dedicated system and channel status indicators. Green, yellow, and red LEDs clearly indicate normal, fault, and alarm conditions for quick status recognition.

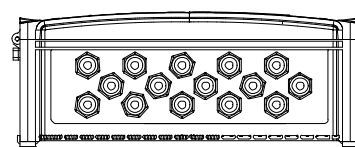
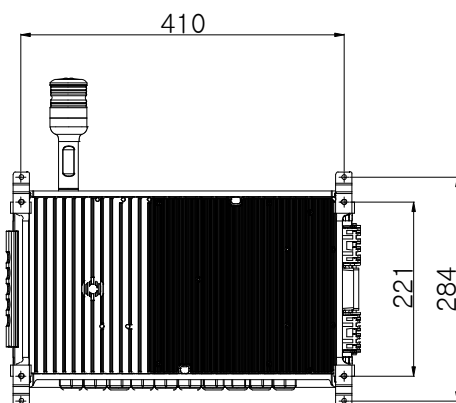
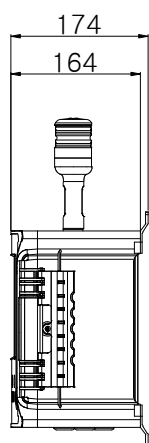
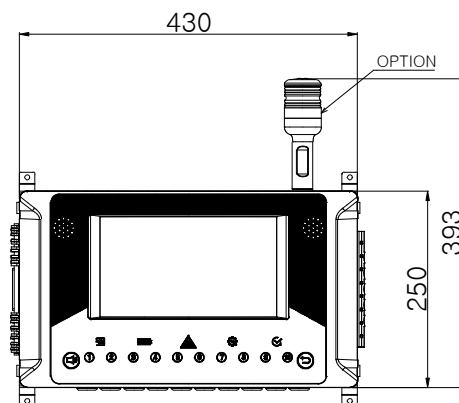
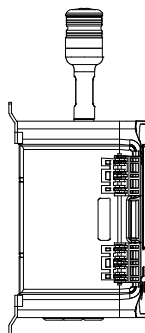
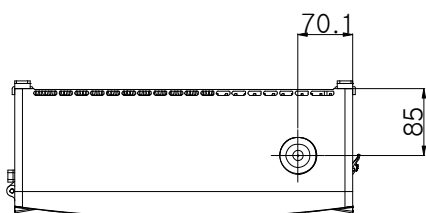
Product Specifications

Specification	Details
Capacity	Up to 10 channels with base unit; up to 20 channels with expansion unit
Size	430 (W) × 250 (H) × 164 (D) mm
Weight	Max. 8.5 kg
Housing Material	PC/ABS
Display	10.1" Touchscreen (Resistive Type)
Language	English, Korean, Chinese
Visual Indicators	5 system LEDs: Power, Battery, Alarm, Service, Status. 3 LEDs per channel: Green (Normal), Yellow (Fault), Red (Alarm)
Audible Alarm	90 dB at 1 m Piezo Buzzer (Alarm); 2 W Speaker (Voice Guidance / Alarm)
Button	Operating Reset / Alarm Mute
4–20 mA Input	4–20 mA DC (2-wire or 3-wire); up to 10 channels with base unit, up to 20 channels with expansion unit
Relay Output	AC 250 V, 5 A / DC 30 V, 5 A relay contact (SPDT); up to 20 channels with base unit, up to 40 channels with expansion unit
4–20 mA Output	4–20 mA DC (2-wire); up to 10 channels with base unit, up to 20 channels with expansion unit
Operating Temperature	–10°C to +55°C
Operating Humidity	5–95% RH
IP Grade	IP65
AC Power	AC 110/220 V, 50–60 Hz ±6%; Max. 150 W
DC Power	DC 18–32 V (Normal DC 24 V); Max. 150 W
Backup Battery	21.8 V / 5100 mAh Lithium-ion battery; >30 minutes for typical system
External Interface	TCP/IP, MODBUS
Logging	Logged events & data
Setup Tools	WinApp program

Certification

Regulatory Compliance	CE (EMC), CE (LVD), KC
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Drawing



Tolerance Limits: ± 0.5
Units: mm

Accessories



Expansion Unit

Other Controllers



COMBI Series System



404+ Remote Monitoring System

Fixed Detectors



LEL Point 1000

Flammable Gas Detector



TOX Point 1000

Oxygen & Toxic Gas Detector



LEL Point 2000

Flammable Gas Detector



TOX Point 2000

Oxygen, Toxic & VOC Gas Detector



NDIR Point 3000

Infrared Gas Detector



VOC Point

PID Gas Detector

Beacon & Sounders



Beacon Sounder



Beacon Sounder ATEX

For more information

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WatchGas is dedicated to continuously improving its products. Therefore, the specifications and features mentioned in this datasheet are subject to change without prior notice.

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