

CARBON DIOXIDE TEMPERATURE & HUMIDITY TRANSMITTER

Etrans -GNT250 Datasheet

Advanced high-precision transmitter for simultaneous monitoring of temperature, humidity, and CO2 in industrial environments.

Precise Measurement,
Ultimate Control

www.enelean.com



TEMPERATURE / HUMIDITY CARBON DIOXIDE TRANSMITTER

MODEL Etrans-GNT250



Application Areas

HVAC (Heating, Ventilation, and Air Conditioning)
Agriculture and Greenhouses
Food and Beverage Production
Pharmaceuticals and Healthcare
Building Automation Systems

Features

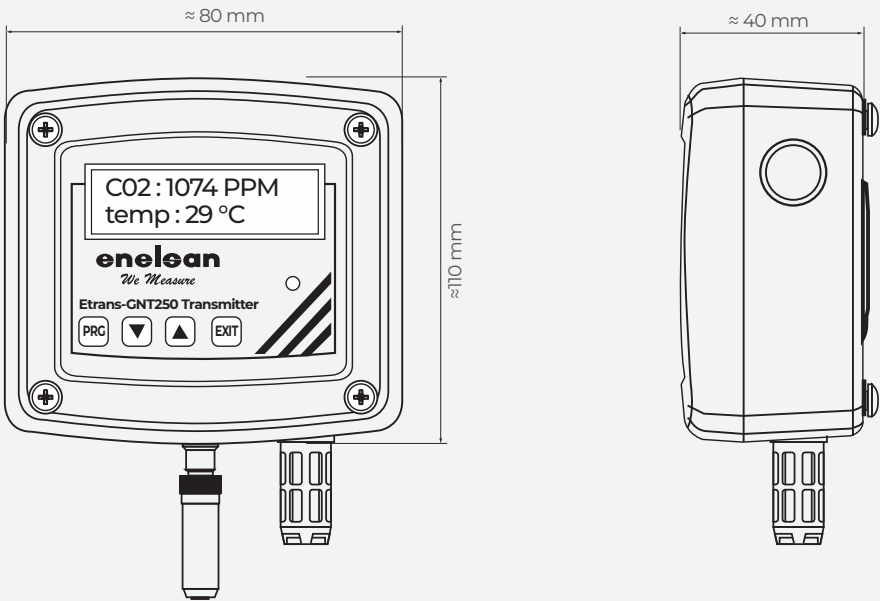
- 3-in-1 Measurement: Accurately measures Temperature (°C/°F), Humidity, and CO2 (PPM/%).
- Reliable Sensor: Long-lasting NDIR CO2 sensor with a 10-year lifespan.
- Communication: RS485 Modbus RTU and scalable analog outputs (4-20mA, 0-20mA, 0-10V).
- Alarms & Control: Configurable 220V relay, built-in audible alarm, and LED indicator.
- User Interface: 2x16 Cog LCD screen with a simple 4-button control menu.
- Power Supply: Operates on 10-32V DC / 12-32V AC with low power consumption (2.8W).

Description

The Enelsan Etrans -GNT250 is an advanced, high-precision transmitter specifically engineered to simultaneously monitor ambient temperature, relative humidity, and carbon dioxide (CO2) levels. Equipped with a highly reliable NDIR CO2 module, this device ensures accurate and stable measurements over a 10-year service life, making it ideal for continuous environmental tracking. It seamlessly integrates into existing building automation and industrial control systems through its user-scalable analog outputs and RS485 Modbus RTU communication protocol. Additionally, the clear 2x16 LCD screen, integrated audible warning system, and fully configurable relay outputs provide operators with an intuitive interface for real-time data analysis and instant response to critical atmospheric changes across various industrial applications.



Structure



Width: 80 mm - 90 mm
Height (Length - excluding sensor probe): 110 mm - 120 mm
Depth (Height/Thickness): 40 mm - 55 mm
Sensor Probe Length: Typically 30 mm - 50 mm

TECHNICAL FEATURES

Brand / Model Code	Etrans -GNT250
Carbon Dioxide (CO2) Measurement	NDIR module. 0...5000 ppm range, 1% accuracy, 0.1 ppm resolution, and 10 years of service life. (Can be read as PPM or %)
Temperature Measurement	-40...+120 °C range, ± 0.3 °C accuracy, ± 0.1 °C resolution. (Can be read in Celsius or Fahrenheit)
Humidity Measurement	0-100 %rH range, $\pm 2\%$ accuracy, $\pm 0.1\%$ resolution.
Analog Outputs	4...20mA / 0...20mA / 0...10V (User-scalable current and voltage).
Communication	RS485 Modbus RTU (1200-115200 baud rate range). All device parameters can be read via this protocol.
Relay and Warning System	1 unit 220V 3A AC relay. Warnings can be assigned to the desired parameter; includes a built-in audible alarm and status LED indicator.
Display and Operation	2x16 Cog LCD Screen and 4 control buttons for easy device menu management.
Power Supply and Consumption	Operates on 10-32V DC or 12-32V AC; maximum power consumption is 2.8W.

TEMPERATURE / HUMIDITY
CARBON DIOXIDE TRANSMITTER



MODEL Etrans-GNT250

Probe Types Used



Metal Sintered Filter
(e.g., Dusty Environments)



Fine Metal Filter
(e.g., Clean Gases)



Plastic Cage
(e.g., Humidity Measurement)



Yellow Humidity /Temperature Probe
(e.g., Corrosion Resistant)

Contact us

Enelsan Istanbul Office Address
Şerifali, Barbaros Cd. No: 60, 34775 Ümraniye/İstanbul

Enelsan Factory 1 Address
Çerkeşli OSB Mahallesi İmes 4 Bulvarı No: 11 Dilovası/Kocaeli

Enelsan Factory 2 Address
Çerkeşli OSB Mahallesi İmes 14. Cadde No: 17 Dilovası/Kocaeli

Phone: +90 262 754 63 13
Fax: +90 262 754 93 93
sales@enelsan.com