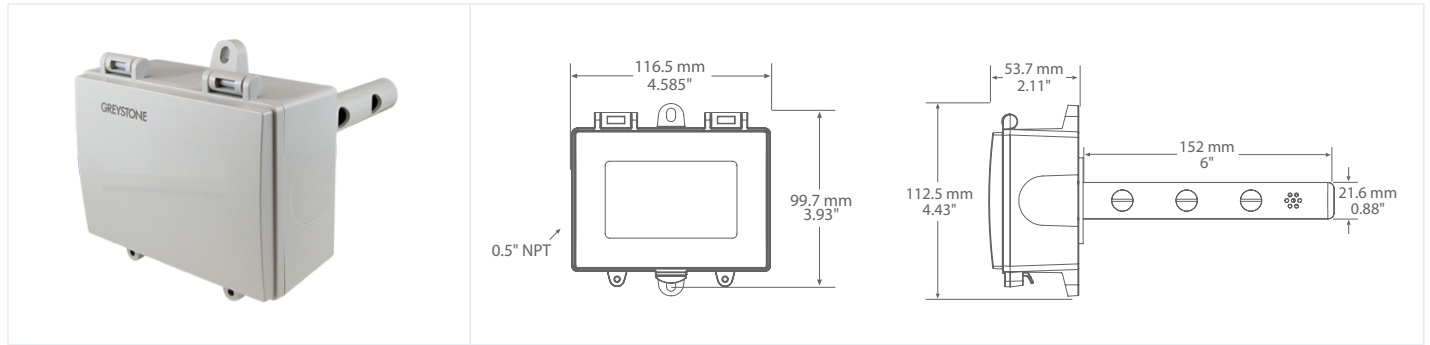




DUCT CARBON DIOXIDE TRANSMITTER



CEDT SERIES

PRODUCT DESCRIPTION

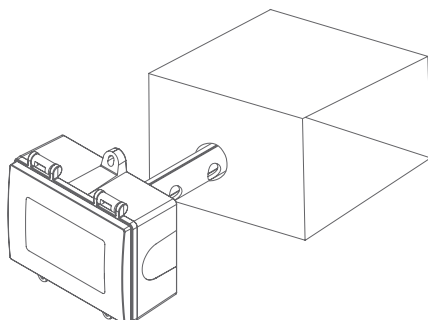
The CEDT series of CO₂ sensor uses a highly accurate and reliable Non-Dispersive Infrared (NDIR) sensor in a duct mount enclosure to monitor return air CO₂ levels for indoor applications. The compact dual wavelength CO₂ sensor achieves excellent performance characteristics, including high accuracy and low power consumption to ensure stable long term operation. The CO₂ sensor features user selectable 4-20 mA or 0-5 Vdc or 0-10 Vdc for simple integration into any building automation system. A polycarbonate enclosure with a hinged and gasketed cover is provided for electrical connections.

TYPICAL INSTALLATION

For complete installation and wiring details, please refer to the product installation instructions.

The CEDT sensor installs on the outside of a return air duct with the sampling tube inserted into the duct. Mount the sensor in an easily accessible location in a straight section of duct at least five feet from corners and other items that may cause disturbances in the air flow. Avoid areas with vibrations or rapid temperature changes.

The enclosure provides mounting tabs for ease of installation.



SPECIFICATIONS

CO ₂ SENSOR	Dual channel non-dispersive infrared (NDIR)
RANGE	0-2000 ppm
ACCURACY	±(30ppm +3% of reading)
TEMPERATURE DEPENDENCY	±2.5 ppm/°C
RESPONSE TIME	20 seconds (T63)
WARM-UP TIME	1 minute
SENSOR LIFE SPAN	>15 years
POWER SUPPLY	24 Vac/dc ±15% (non-isolated half-wave rectified)
CONSUMPTION	80 mA max @ 24 Vdc, 160 mA max @ 24 Vac
PROTECTION CIRCUITRY	Reverse voltage and transient protected
OUTPUT SIGNALS	4-20 mA, 0-5 Vdc, 0-10 Vdc (field selectable)
DRIVE CAPABILITY @ 24 VDC	Current: 600Ω maximum Voltage: 10 KΩ minimum
OPTIONAL TEMPERATURE SENSOR	Various thermistors or RTD's as a 2 wire resistance output
OPERATING CONDITIONS	0 to 50°C (32 to 122°F), 0-90 %RH non-condensing
STORAGE CONDITIONS	-40 to 70°C (-40 to 158°F), 0 to 85 %RH non-condensing
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
ENCLOSURE	B: Polycarbonate, UL94-V0, IP65 (NEMA 4X) F: Same as B with thread adapter (1/2" NPT to M16) and cable gland fitting
PROBE	152mm L x 21.6mm D (6" x 0.85")
APPROVALS	CE, RoHS
COUNTRY OF ORIGIN	Canada

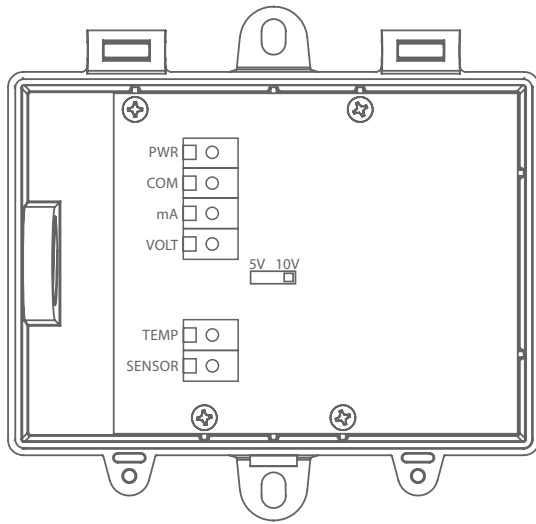
This CO₂ sensor incorporates a Self Calibration feature to correct CO₂ sensor drift. This CO₂ sensor is recommended for applications where the CO₂ level will be close to normal (400 ppm) at least one hour per day. If the monitored space is occupied 24 hours or consistently maintains higher levels of CO₂ level, the CD2 Series is recommended.

ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION





WIRING INFORMATION



TERMINAL	FUNCTION
PWR	+ 24 Vac/dc
COM	Common
mA	Current Output
VOLT	Voltage Output
TEMP	Resistance Output
SENSOR	Resistance Output

ORDERING

PRODUCT	CEDT	Duct Carbon Dioxide Transmitter
ENCLOSURE	B	Polycarbonate with hinged and gasketed cover
	F	Same as B, with thread adapter and cable gland fitting
SENSOR	00	No temperature selected
	02	100Ω Platinum RTD
	05	1801Ω Thermistor
	06	3000Ω Thermistor
	07	10,000Ω Thermistor, type 3
	08	2.252KΩ Thermistor
	12	1000Ω Platinum RTD
	13	1000Ω Nickel RTD
	14	10,000Ω Thermistor, Type 3 with 11K shunt resistor
	20	20,000Ω Thermistor
	24	10,000Ω Thermistor, Type 2
	59	10,000Ω 25°C, ±1%, B = 3435 ±1% (25/85)

PART NUMBER

CEDT

NOTE: Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.