

air quality awareness & ventilation effectiveness



DLG01



DL10



CDT022



IAQ Awareness

Real-time indoor air quality (IAQ) monitoring accomplished by CDT022 / DLG01 / DL10 installed strategically throughout your facility. Choose among modulating signal, active output or minute-by-minute readings of ambient and duct temperature, humidity, particulate and CO₂ for your clean air system. Identifying trends and problem areas is the first step to occupant productivity and sustainable indoor environment.

Sensors and Loggers

- **Features:** choose among 5 main IAQ factors
- **Low maintenance:** self-calibrated CO₂ sensors
- **Versatility:** 0-10V / 4-24mA configurable
- **Automatic:** data uploaded to Cloud
- **Affordability:** expensive software, plugins, license not required
- **Visual Alert:** Traffic light – red for danger / blue for moderate / green for clean air

Specifications

Carbon Dioxide

Operating Principle	Non-dispersive infrared (NDIR) absorption
Operating Temperature	3°C ~ 45°C (37.4°F ~ 113°F)
Operating Humidity	0% ~ 95% R.H.
Measuring Range	400 ~ 5,000ppm
Accuracy	±50 ppm ±3% of reading @ 25°C / 77°F
Warmup Time	5 minutes
Calibration	Periodic Automatic Calibration (ACDL) or manual to 400ppm
Pressure dependency	0.13% of reading per mm Hg (normal atmospheric conditions of ~100Kpa)
Storage temperature	-30°C to 70°C (-22°F ~ 158°F)
CO ₂ Traffic Light	<div>0 ... 750ppm</div> <div>750 ... 1250ppm</div> <div>1250 ... 4000ppm</div>

Particulate Matters

Operating Principle	Laser scatter method sensor
Operating Temperature	3°C ~ 45°C (41°F ~ 113°F)
Operating Humidity	5% ~ 89% R.H.
Particles Target size	2.5 µm
Effective Concentration	0 ~ 1,000µg/m³
Resolution	1µg/m³
Accuracy	±10 µg/m³
Particle count rate	65,500/o.1L max.
Response Time	5 seconds
Storage temperature	-30°C to 70°C (-22°F ~ 158°F)

Temperature

Range	0° ~ 50°C / 32° ~ 122°F
Resolution	0.1°C at 25°C / 0.2°F at 77°F
Accuracy	±0.3°C from 0° ~ 50°C / ±0.54°F from 32° ~ 122°F
Drift	< 0.1°C per year / 0.18°F per year
Ambient temperature	High-precision NTC 10K thermistor with ±1% tolerance in B-value
External temperature	External temperature sensor cables in various lengths
Display unit	°C / °F switchable

Relative Humidity

Range	1% ~ 90% R.H. non-condensing
Resolution	0.01%
Accuracy	±2% from 20% ~ 80% R.H.
Drift	< 1% per year

Wi-Fi Logger

Protocol	IEEE802.11b/g/n
Transmission Frequency	2.4GHz
Transmission Range	2,400ft ² indoors
Antenna	PCB antenna x2
Data storage	16MB for 1,500,000 measured data with time stamp
Logging Rate	Once per 60 seconds ~ once per 60 minutes
Cloud Synchronization	Upload on requests or Upload periodically
Memory Mode	Wrap-when-full or Stop-when-full
Operating temperature	5°C ~ 45°C (41°F ~ 113°F)
Operating humidity	10% ~ 80% R.H.
Input Power	Micro USB power adapter 5V _{DC} 500mA

Remote Monitoring

Loggers with stable Wi-Fi access can be viewed online in real-time 24 x 7.

Visual presentation of dashboard with history and trends of multiple loggers in full display for easy viewing on the web portal.

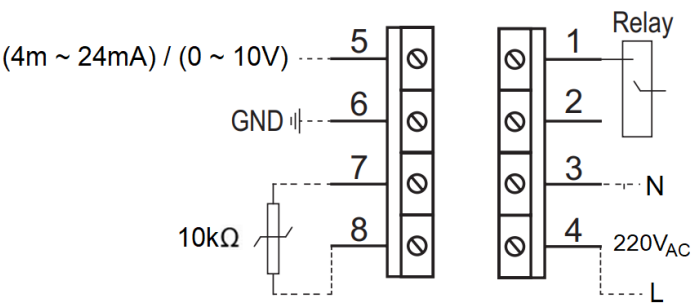
Data can be downloaded in csv format for further analysis and documentation purpose.

No pre-installed software or license is required.

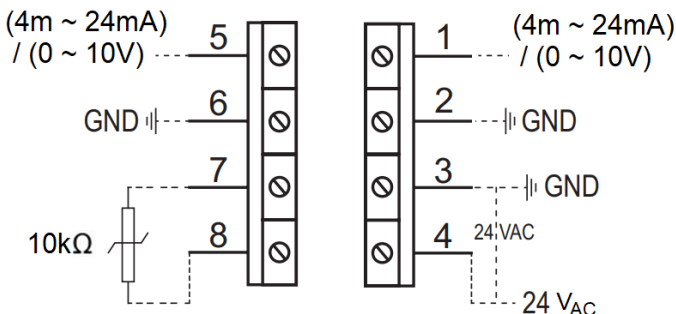


Product Wiring Diagram

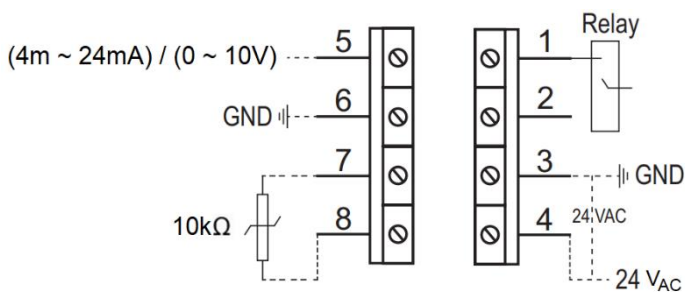
Part numbers:
CDT022T / CDT022H / CDT022Q



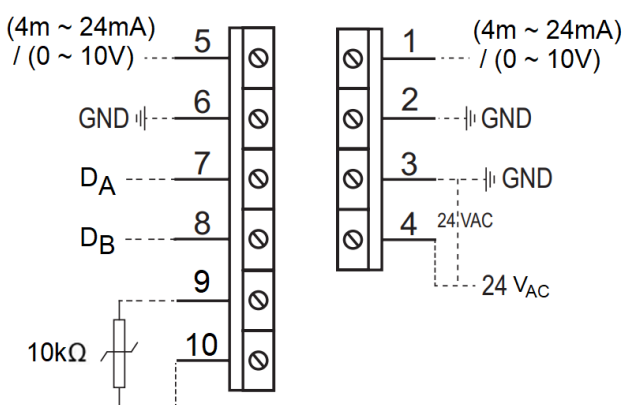
Part numbers:
DL10T / DL10H / DL10C / DL10Q



Part numbers:
CDT020T / CDT020H / CDT020Q

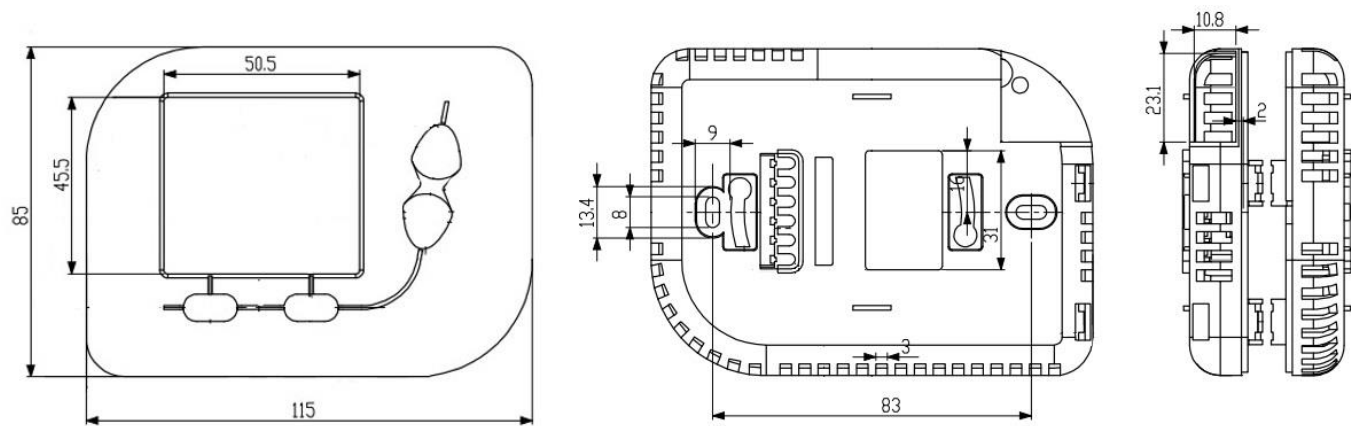


Part numbers:
DL10T-MOD / DL10H-MOD /
DL10C-MOD / DL10Q-MOD

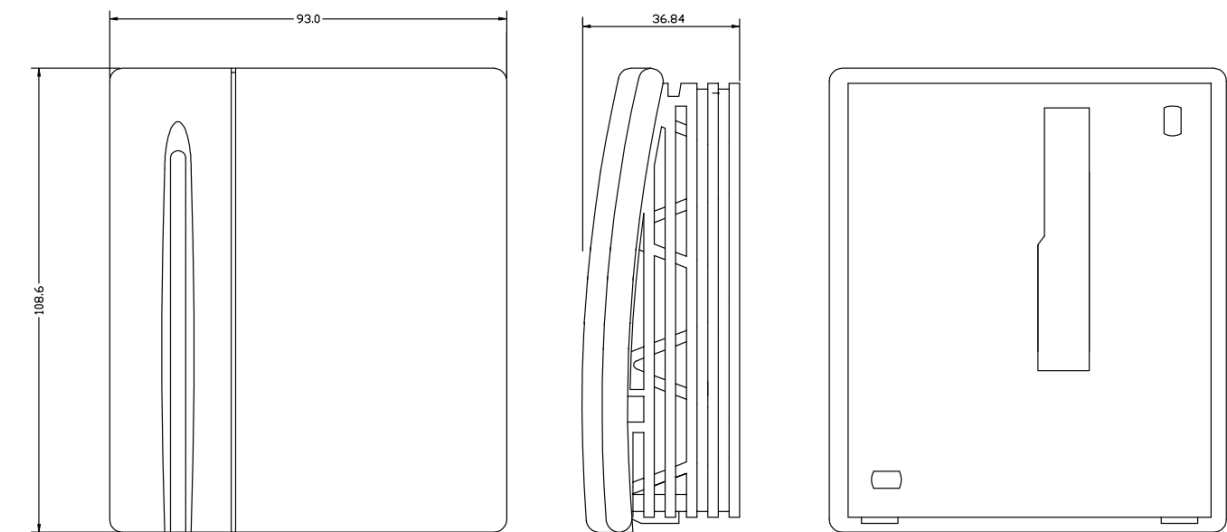


Product Dimensions

CDT / DLG Series



DL10 Series



Product Range and Models

Type	#	Sensing Element					Outputs		Power Supply			Connectivity	
		Ambient Temp	External Temp	R.H.	CO ₂	PM2.5	On/Off	0~10V / 4~24mA	110V _{AC} / 220V _{AC}	24V _{AC}	USB	Wi-Fi	RTU
Sensors	CDT022T-W	•	•				•	•	•			•	
	CDT022H-W		•	•			•	•	•			•	
	CDT022C-W		•		•		•	•	•			•	
	CDT022Q-W		•			•	•	•	•			•	
	WR252T-W	•	•				•	•	•			•	
	WR252H-W		•	•			•	•	•			•	
	WR252C-W		•		•		•	•	•			•	
	WR252Q-W		•			•	•	•	•			•	
Active Sensors	DL10T	•						•		•			
	DL10H	•		•				•		•			
	DL10C	•			•			•		•			
	DL10Q	•				•		•		•			
	DL10T-MOD	•	•				•	•		•			•
	DL10H-MOD	•	•	•			•	•		•			•
	DL10C-MOD	•	•		•		•	•		•			•
	DL10Q-MOD	•	•			•	•	•		•			•
Loggers	DLG01T-W	•									•	•	
	DLG01H-W			•							•	•	
	DLG01C-W				•						•	•	
	DLG01Q-W					•					•	•	