Carbon dioxide, Humidity, Temp., NDIR, 0 to 4,000 ppm, RS232

CO $_2$ METER

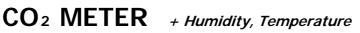**Model : GCH-2018**   *ISO-9001, CE, IEC1010*

CO2   520 PPM
25.0 °C

POWER   HOLD ESC   REC ENTER

SET ▲   ALARM ▼
          Dew Point

CO₂ Meter
Carbon dioxide + Humidity / Temp.
Lutron   GCH-2018

Lutron

LUTRON ELECTRONIC

The Art of Measurement

CO$_2$ METER *+ Humidity, Temperature*
Model : GCH-2018

FEATURES

*	NDIR method principal for CO2 (Carbon dioxide) measurement, available for long term operation.
*	High repeatability and high accuracy.
*	Two probes, one is for CO2/Temp. measurement, the other probe is for Humidity/Temp./Dew point measurement.
*	Separate probe, easy operation and convenient for remote measurement.
*	CO2 function with alarm setting.
*	Humidity measurement with fast response time.
*	Large S-TN LCD, high contrast, easy readout.
*	Data hold function for freezing the desired value on display.
*	Records Maximum and Minimum readings with Recall.
*	RS232/USB computer interface.
*	Microprocessor circuit assures maximum possible accuracy, provides special functions and features.
*	Heavy duty & compact housing with hard carrying case, designed for easy carry out & operation.
*	Auto shut off is available to save battery life.
*	Power supply from batteries or DC 9V adapter in.

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 52 mm x 38 mm dual function LCD display.	
Measurement	CO2 (Carbon dioxide), Temp. Humidity, Dew point, Temp.	
Unit	CO2	ppm
	Humidity	% RH
	Dew point	℃ , ℉
	Temp.	℃ , ℉
Response Time	*CO2 :* < 2 min. typically. *@ Reach the 63% reading value* *@ Depend the environment air circulation.* *Humidity/Dew point :* 10 to 30 seconds typically. *@ Reach the 85% reading value* *@ Depend the environment air circulation.*	
CO2 altitude compensation setting	0 to 9,000 meters.	
Temperature Compensation	Automatic temp. compensation.	
Adavanced setting	CO2 altitude value setting CO2 alarrm value setting ℃/℉ setting Auto power off enable/disable setting	
Alarm setting	For CO2 measurement only.	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Display Sampling Time	Approx. 1 second.	
Power off	Auto shut off saves battery life or manual off by push button.	
Data Output	RS 232/USB PC serial interface. * * Connect the optional RS232 cable UPCB-02 will get the RS232 plug.* * * Connect the optional USB cable USB-01 will get the USB plug.*	
Probes no.	Two probes : * * Probe 1 is for CO2, Temp. measurement.* * * Probe 2 is for Humidity, Dew point. Temp. measurement.*	
Operating Temperature	0 to 50 ℃.	

Operating Humidity	Main instrument : Less than 85% R.H.
	C02 probe : Less than 85% R.H.
	Humidity probe : 0 to 95 %RH.
Power Supply	DC 1.5 V battery (UM3, AA) x 6 PCs, or equivalent.
Power Current	CO2 measurement Approx. DC 9.6 mA for 90% period. Approx. DC 128 mA for 10% period.
	Humidity measurement Approx. DC 5.6 mA.
Weight	Main instrument : 372 g/0.82 LB. *@ Battery is included.*
	CO2 probe : 158 g/0.35 LB.
	Humidity probe : 82 g/0.18 LB.
Dimension	Main instrument : 173 x 68 x 42 mm (7.9 x 2.7x 1.2 inch)
	CO2 Probe : 185 x 38 x 26 mm
	Humidity Sensor Probe : 200 x 23 x 19 mm
Accessories Included	Instruction manual........................1 PC CO2 probe....................................1 PC Humidity probe.............................1 PC Hard Carrying case....................... 1 PC
Optional Accessories	ACV to DC 9V adapter RS232 cable, UPCB-02 USB cable, USB-01 Data Acquisition software, SW-U801-WIN

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

CO2 (Carbon dioxide)

CO2 (Carbon dioxide)	Range	0 to 4,000 ppm
	Resolution	1 ppm
	Accuracy	± 40 ppm * ≦1,000 ppm.
		± 5% of reading * > 1,000 ppm ≦ 3,000 ppm.
23 + 5 ℃.		± 250 ppm typically * > 3,000 ppm, reference only
	Repeatability	± 20 ppm * ≦ 3,000 ppm.
Temperature	Range	0 ℃ to 50 ℃,32 ℉ to 122 ℉.
	Resolution	0.1 degree
	Accuracy	℃ - 0.8 ℃, ℉ - 1.5 ℉.

Humidity/ Temp./Dew point

Humidity/ Temperature

Humidity	Range	10 % to 95 % R.H.
	Resolution	0.1 % R.H.
	Accuracy	≧70% RH : ± (3% reading + 1% RH). < 70% RH : ± 3% RH.
Temperature	Range	0 ℃ to 50 ℃,32 ℉ to 122 ℉.
	Resolution	0.1 degree
	Accuracy	℃ - 0.8 ℃, ℉ - 1.5 ℉.

Dew Point

℃	Range	-25.3 ℃ to 48.9 ℃
	Resolution	0.1 ℃
℉	Range	-13.5 ℉ to 120.1 ℉.
	Resolution	0.1 ℉.

Remark :   * *Dew Point display value is calculated from the Humidity/Temp. measurement automatically.* * * The Dew Point accuracy is sum accuracy value of Humidity & Temperature measurement..*