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

CO ₂ METER

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

LUTRON ELECTRONIC

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) 23 + 5 ℃.	Range	0 to 4,000 ppm
	Resolution	1 ppm
	Accuracy	± 40 ppm * *≦1,000 ppm.*
		± 5% of reading * *> 1,000 ppm ≦ 3,000 ppm.*
		± 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..*	

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* Appearance and specifications listed in this brochure are subject to change without notice.   1808-GCH2018