CM5017O

CM5017O-01 Oceanographic CO_2 Coulometer

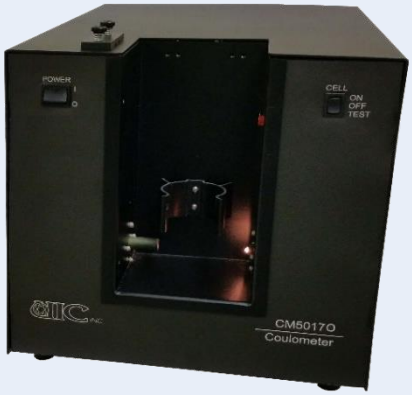
Dissolved Inorganic Carbon (DIC) in Sea Water
For use with CM5260 MODICA system

The Coulometer uses coulometric detection. The carbon Coulometer measures carbon as CO_2. The gas stream resulting from the MODICA unit is bubbled through the coulometer analytical cell. The carbon coulometer solution contains ethanolamine and a colorimetric pH indicator. The CO_2 from the gas stream reacts with the ethanolamine forming a strong titratable acid, causing the color indicator to fade. The coulometer photometer recognizes this condition and initiates the electrochemical generation of electrons returning the solution to the original color. The current for this 100% efficient coulometric process is integrated and digitally displayed in user selected units. The Oceanographic unit is supplied with the CM5011 Emulation firmware necessary to allow direct connection to the MODICA software. No other software is required.

The CM5017O Coulometer sits on a conventional lab bench capable of supporting 40 lbs. The Coulometer stands 12" wide by 12" high by 19.2" deep. The instrument is constructed of aluminum and steel. The unit is designed with a cell compartment, power switch, cell current switch, and a 13.3 x 12.1" LCD touch screen to act as the user interface to the instrument. The instrument is supplied with is an analytical cell assembly, power conditioner, power cord with a NEMA 5-15 plug and an RS232 serial cable. The unit is also supplied with a set of cell reagents and operation manual. The unit when supplied for 110-120V 50/60 HZ operation requires one AC circuit capable of supplying 1.5 amps.

CM5017O CO_2 Coulometer

- No user calibration
- 100% efficient coulometric detection
- Wide, linear dynamic range
- Readability to 0.01 µg Carbon
- Relative standard deviations of < 0.2% for standard certified materials
- 12.1" LCD Touch Screen
- Typical analysis time of 8-10 minutes
- LIMS Compatible



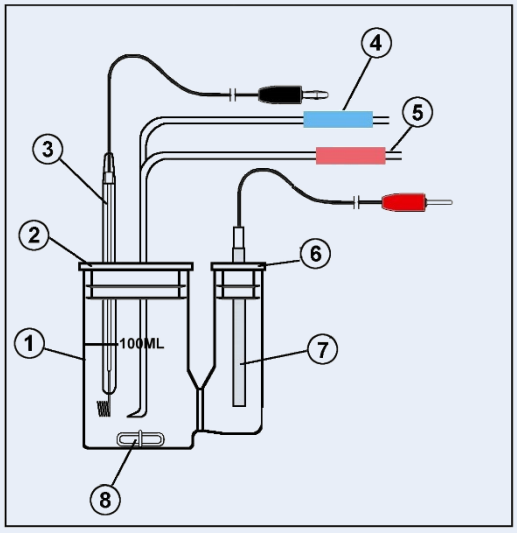
Part Numbers
CM5017-01 for 110V / 50/60Hz
CM5017-02 for 220V / 50/60Hz

For more information contact UIC Europe www.uic-europe.com
Phone: +351 910 908 188; Email: zjovanovic@uic-europe.com

CM5017O

CM210-032 – Titration Cell includes:

1.CM200-051 – Titration Cell with Side Arm
2.CM119-027 – Cathode Top, White Teflon
3.CM101-135 – Platinum Electrode (black lead)
4.CM190-020 – Gas Inlet Tube (blue tag)
5.CM190-021 – Gas Exit Tube (red tag)
6.CM119-028 – Anode Top, White Teflon
7.CM101-033 – Silver Electrode (red lead)
8.CM121-001 – Stir Bar



CM310-001 – Cell Reagent Kit includes:

- CM300-001 – Carbon Cathode Solution (1 gallon)
- CM300-002 – Carbon Anode Solution (16 ounces)
- CM300-003 – Potassium Iodide (50 grams)

Technical Differences between CM5017O and CM5015O Oceanographic CO_2 Coulometers

1. Touch screen - New touch screen streamlined for Oceanographic application.
2. Emulation Standard - CM5017O is supplied with CM5011 Emulation as standard and only program.
3. 50 mA Optimization – Instrument is supplied with 50 mA cell current. Instrument is optimized so that the full analytical measuring range of the A to D converter is used for the 50mA cell current. Instrument can only be used with a 50-mA cell current.
4. Open Cell Compartment- Instrument is supplied with an external open style cell compartment and associated Cell assembly for ease of use and compatibility to older style CM5011 configuration.

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