



Online Total Copper Analyzer

Model : TCuG-3050

The total copper online automatic analyzer is an optical method heavy metal online analyzer designed according to national environmental protection standards. It is applied to the simultaneous online analysis of various heavy metal elements in surface water, industrial process water and industrial wastewater. The measured heavy metal elements include environmental protection. The first and second categories of heavy metal prevention and control projects in the 12th Five-Year Plan for Comprehensive Prevention and Control of Heavy Metal Pollution.

Working principle

Total copper was determined by sodium diethyldithiocarbamate spectrophotometry. Under high temperature, various copper compounds in water samples were digested by nitric acid to become positive divalent copper ions. Under ammonia conditions, copper ions The complex reaction with sodium diethyldithiocarbamate produces a yellow-brown complex. In a certain concentration range, the absorbance of the system is directly proportional to the concentration of copper ions, that is, the total copper content in the water sample can be determined according to the spectrophotometry.

Technical parameters

Method: Diethyldithiocarbamate spectrophotometry

Measuring range: 0-3.00mg/L ,0.10-10.00mg/L

Accuracy: Accuracy: $\leq \pm 10\%$ when $\geq 0.2\text{mg/L}$;
 $\leq \pm 0.02\text{mg/L}$ when $< 0.2\text{mg/L}$

Repeatability: $\leq \pm 5\%$;

Stability: $\leq \pm 10\%$ in 24hours;

Measurement period :The minimum measurement period is 30 minutes.

user can modify the color development time arbitrarily from 5 to 120 minutes

Sampling period :Time interval(55~9999min adjustable by yourself) and

Integral time measurement mode;

Calibration period: adjustable in 1~99days;

Maintenance period: Usually one time per month and 30 minutes each time

Output: 4~20mA(2 ways) RS232,RS485;

Ambient requirement: it should be indoor and temperature can be adjustable.

The recommend temperature is $+5\sim 28^{\circ}\text{C}$;humidity $\leq 90\%$ (no dew) ;

Power:AC220 $\pm 10\%$ V,50 $\pm 10\%$ Hz,5 A;

Dimension size: Height 1450 \times Width510 \times Length 450 mm;

Data saved: the data can be saved when abnormal alarms and power off.

Display: touch screen and Command Input

Other: When Reset after abnormal alarm and power on after off,

the instrument automatically discharges residual reactants in the instrument and automatically resumes working status.

