



## Online Total Iron Analyzer

Model : TFeG-3060

### Introduction

The online and automatic total iron 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

The ferric ion in the water sample is reduced to ferrous ion by hydrogenamine hydrochloride. Under the action of the buffer, the ferrous ion reacts with the phenanthroline to form a colored complex. The analyzer detects the change of the color. And convert this change into the total iron output. The amount of colored complex formed is equivalent to the total amount of iron.

### Technical parameters

Method: O-phenanthroline spectrophotometry

Measuring range:0.00-5.00 mg/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.

