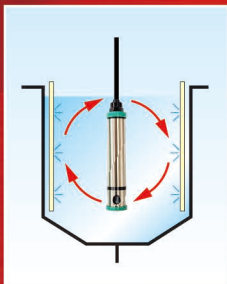


KRK


WATER QUALITY SENSORS

PortLab.5000E Part.1



DO
1

DO-11Z
DO Meter



0~20.00mg/ℓ

P1.

pH/ORP
2

KP-11Z/KP-11F
pH/ORP Meter



pH : 0.00~14.00
ORP : 0±1999mV(KP-11Z)

P2.

Cl⁻
3

CL-11Z
Chloride Meter



Cl⁻ : 0~2000mg/ℓ

P3.

Cl⁻
4

CL-203N
SALT Meter




Cl⁻ : 0~1.000%

P3.

Transparency
5

TP-10Z
Transparency Sensor



2~200cm

P4.

F⁻
6

F-10Z
Fluoride Ion Meter



F⁻ : 0~2000mg/ℓ

P4.

MLSS/SZ
7

SS-10Z/10F
MLSS Meter



MLSS : 0~20000mg/ℓ
DEPTH : 0~5m(SS-10Z)

P5.

TURB
8

TR-5Z
Turbidity Meter



Turb : 0~200(NTU)

P6.

SS/Turb
9

SSTR-5Z
SS/Turbidity Sensor



Turb : 0~500NTU
SS : 0~500mg/ℓ

P6.

TURB
10

TR-55
Turbidity Meter



Turb : 0.00~1100(Degree)

P7.

TURB/CR
11

TCR-30
Turbidity/Colority Sensor



Turb : 0~50
Color : 0~50

P7.

TURB/CR
12

TCR-5Z
Turbidity/Colority Sensor




Turb : 0~50 Color : 0~50
Abs : 0~2Abs

P8.

RC
13

RC-V2
Chlorine Meter(Multi)



Cl₂ : 0~200g/ℓ

P8.

H.RC
14

RC-3F
H.Chlorine Meter



Cl₂ : 0~500mg/ℓ

P9.

RC
15

DP-3F
Chlorine Meter



Cl₂ : 0~5mg/ℓ

P9.

O₃
16

O₃-3F
Ozone Meter



O₃ : 0~3mg/ℓ

P10.

WATER QUALITY SENSORS

PortLab.5000E Part.1

EC **EC-5Z**
17 **Conductivity Meter**



EC-5Z-H : 0~20S/m
EC-5Z-L : 0~2S/m

P10.

CHL **CHL-30N**
18 **Chlorophyll Sensor**



CHL : 0.0~200µg/ℓ

P11.

CHL **CHL-5Z**
19 **Chlorophyll Sensor**



CHL : 0.0~200µg/ℓ

P11.

CU **CU-5Z**
20 **Copper Meter**



Cu : 0~76.3g/ℓ

P12.

Ni **Ni-5Z/Ni-5ZL**
21 **Nickel Meter**



Ni-5Z : 0~199.9g/ℓ
Ni-5Z-L : 0~19.99g/ℓ

P13.

Cu/Ni **CuNi-5Z**
22 **Copper/Nickel Meter**



Cu : 0~80g/ℓ
Ni : 0~199.9g/ℓ

P14.

Cu **Cu-V2**
23 **Copper Meter**



Cu : 0~10mg/ℓ

P15.

Ni **Ni-V2**
24 **Nickel Meter**



Ni : 0~10mg/ℓ

P15.

H₂SO₄ **H₂SO₄-55**
25 **Sulfuric acid Meter**



H₂SO₄ : 0~199.9g/ℓ

P16.

CuSO₄ **CuSO₄-55**
26 **Copper Meter**



Cu : 0~120.0g/ℓ

P16.

Density Meter **LQ-5Z-MULTI**
27 **Density Meter**



ITEM	TMAH	NaOH	Na ₂ CO ₃	NH ₃
	H ₂ SO ₄	HNO ₃	HCl	TEMP

P17.

Density Meter **LQ-5Z Series**
28 **Density Meter**



ITEM	TMAH	NaOH	KOH	NH ₃
	H ₂ SO ₄	HNO ₃	HCl	TEMP

P17.

H₂O₂ **H₂O₂-V1,V2,V3**
29 **Hydrogen Peroxide Meter**



H2O2-V1 : 0.0~120.0g/ℓ
H2O2-V2 : 0~1200mg/ℓ
H2O2-V3 : 0.00~25.00mg/ℓ

P18.

Cl⁻ **CLCU-55**
30 **Chloride Meter for Copper Planting Liquid**



Cl⁻ : 0~199.9mg/ℓ

P18.

Aqua Testers **AQUA TESTERS Z**
31 **COLORIMETRIC**



DPD/BTB etc.

P19.

Water Simple Analysis kit **IONTEST**
32 **COLORIMETRIC**



Cu, Ni, NH₄, COD, Cr HOCL,
O₃, CN, H₂O₂, NO₂, NO₃,
PO₄, TN, Fe, Zn, TN

P20.

DO

DO METER

DO-11Z

1

Air Span Calibration [Sat.(%) & DO(mg/l)]



Cartridge Type DO Sensor

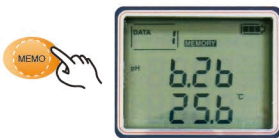
OXNIT® OX-V3



※ OXNIT® is the KASAHARA's registered trade mark

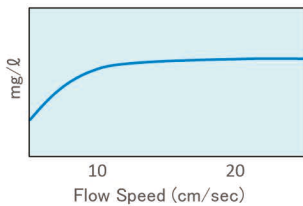
◆With Memory Function

Press **MEMO** switch to memorize the displayed value.



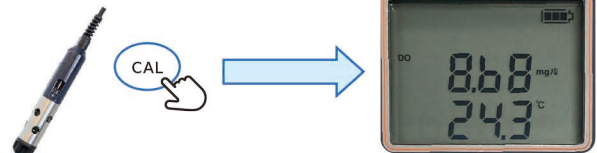
◆A Little Flow Speed, 15cm/sec over

Preceise measurement



◆Air calibration

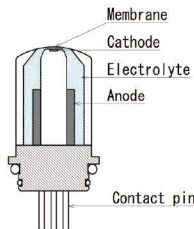
Easy to calibrate in air



Calibration is complete when the count down ends.

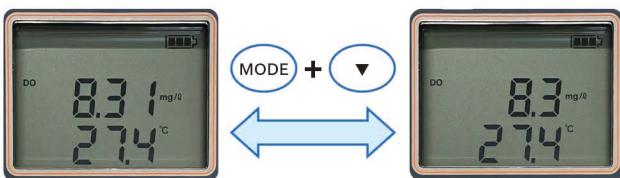
◆NEW DO SENSOR OX-V3 OXNIT®

Sensor Life UP
Stability UP
Weatherability UP

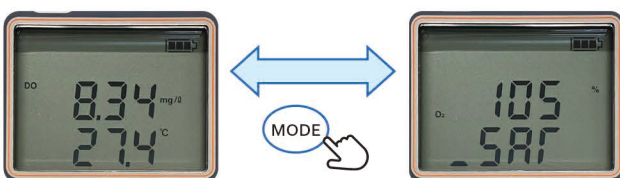


◆Display digits change - over function

After the decimal point, 2 digits ⇒ 1 digit



◆Change - over function DO(mg/l) ↔ SAT(%)



Measured value display

Saturation rate display

◆Specifications

Model	DO-11Z
Measuring method	Galvanic cell method
Measuring ranges	DO : 0.00~20.00mg/ℓ Saturation : 0~200% Temperature : -5.0~50.0℃
Minimum resolution	DO : 0.01 / 0.1mg/ℓ (Mode switching) Saturation : 1% Temperature : 0.1℃
Accuracy	DO : Within±0.2mg/ℓ Temperature : Within±0.5℃
Calibration	Automatic air calibration
Temp. compensation	Automatic by thermister(Ω)
Salt revision	Fresh water / Sea water shift
Diagnostic functions	S ERR, CAL ERR, Bat ERR mark
Other functions	Data memory (MAX : 30 DATA), Display hold
Structure	Water-proof performance equivalent to IP67 (The detector be property connected to the instrument.)
Power	DC4.5V (LR03 battery×3) Auto Power off system(30min)
Dimentions / Weigth	Approx 70(W)×173(D)×40(H)mm / 290g

◆DO probe/DO sensor

Model	DO probe : OXP-3V-3 DO sensor : OX-V3 (OXNIT®)
Cable length	3m standard (Optipon : 5m)
Dimentions / Weigth	DO probe : Approx φ30.6×169mm / 360g

⚠ DO-11Z is not compatible for DO-10Z ⚠ OX-V3 is not compatible for OX-V2

◆Usage



septic tanks

Sewage

fish culture



◆4 items are measured by a Single Electrode.

By shifting mode switch, pH/ORP/Water Temperature/mV (Electrode Potential) are measured.



◆Standard Type pH/ORP Electrode PHD-11

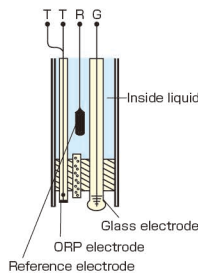
pH/ORP/water temperature are measured by inside-liquid supplying type Electrode.(KP-11Z)

◆Optional Throw-in Type Electrode

PHD-120-3 (5)
pH/ORP/water temperature are measured by inside-liquid supplying type Electrode.(KP-11Z)

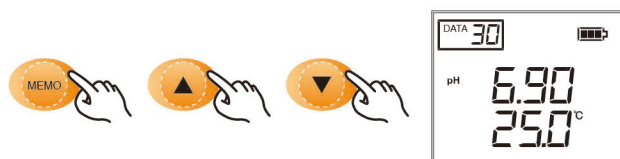


Not inside-liquid supplying Type, but Double Junction structure, and strong on Water Pressure.



◆With Memory Function

- ① press MEMO switch to memorized.
- ② "MEMORY", "DATA" display with ▲▼ keys.



◆Diagnostic Functions

S,CAL ERR, BAT, Err Mark

◆Specifications

Meter		
Product Name / Model	KP-11Z	KP-11F
Product Name	pH/ORP Meter	pH Meter
Method	pH : Glass Electrode Method ORP : PT Electrode Method(KP-11Z) Temp : Thermistor Method	
Range	pH : 0.00~14.00 mV : 0±1999mV ORP : 0±1999mV(KP-11Z) Temp : 0.0 ~ 50.0°C	
Repeatability	pH : within ±0.02pH mV : within ±2mV ORP : within ±2mV(KP-11Z) Temp : within ±0.5°C	
Back Light	Back Light LED ON	
Temp Compensation	Automatic by thermistor(20kΩ)	
Self Diagnostic Functions	S,CAL ERR, BAT, Err Mark	
Data Memory	Max 30 data	
Power	DC4.5V(LR03X3) Auto-Power off	
Structure	IP67 water proof	
Dimensions	Approx 70(W)×173(D)×40(H)mm	
Weight	Approx 290g	

◆Detector

Model	PHD-11(for KP-11Z)	PHD-11F(for KP-11F)
Product Name	pH / ORP Electrode	pH Electrode
Cable Length	1m	
Dimensions	Approx φ17×195mm	

◆STD Components

Mainbody, Electrode, STD pH Solution (pH4 & 7), Pipette, Beaker
Inner Liquid (3.3 M KCL).

◆Optional Accs

Throw-in type Electrode (φ25)		
Name	pH / ORP Electrode For KP-11Z	pH Electrode For KP-11F
Model	PHD-120-3(w / cable 3m)	PHD-120F-3(w / cable 3m)
Model	PHD-120-5(w / cable 5m)	PHD-120F-5(w / cable 5m)

Cl⁻

CHLORIDE ION METER

CL-11Z

(Range : 0~2000mg/ℓ)

3

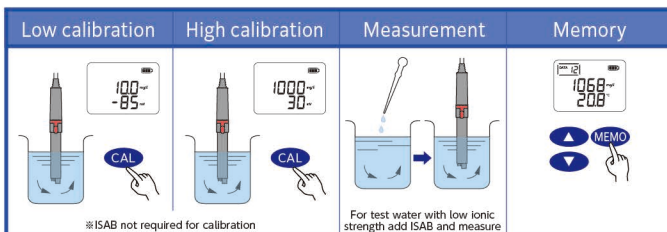
ISAB not required for calibration, Newly developed long-life electrode.



Hg Free

◆Specifications

Model	CL-11Z (Not compatible with CL-10Z)
Range	Cl ⁻ : 0~2000mg/ℓ mV : 0~±1000mV (For electrode inspection) Temp : 0.0~50.0°C (Recommended Use 5~45°C)
Resolution	Cl ⁻ mode : 0.1mg/ℓ (0.1~99.9mg/ℓ) : 1mg/ℓ (100~2000mg/ℓ) mV mode : 1mV Temp : 0.1°C
Temp. compensation	Automatic by thermistor (20KΩ)
Repeatability	Cl ⁻ : Within ±2% Temp : Within ±0.5°C
Self diagnosis function	Disconnection : S ERR Calibration ERR : CAL ERR Battery shortage : Battery mark blinks
Memory function	Max 30 data
Power	DC4.5V (LR03 battery×3) Auto power off system (30 minutes)
Structure	Corresponding to IP67 (The detector be properly connected to the instrument.)
Outer dimension	Approx 70(W)×173(D)×40(H)mm



◆Standard Components

Main body (CL-11Z), Chloride ion electrode (CLD-11)
10mg/ℓ Standard solution Cl⁻ : CLSLN-10-50 (50mℓ)
1000mg/ℓ Standard solution Cl⁻ : CLSLN-1000-50 (50mℓ)
Inner liquid for CLD-11 : CLDLQ-30 (30mℓ)
(*Not compatible with CL-10Z)
Ion strength adjustment buffer (ISAB) : 50mℓ
Pipette, sand paper, Vinyl cover, carrying case

Cl⁻

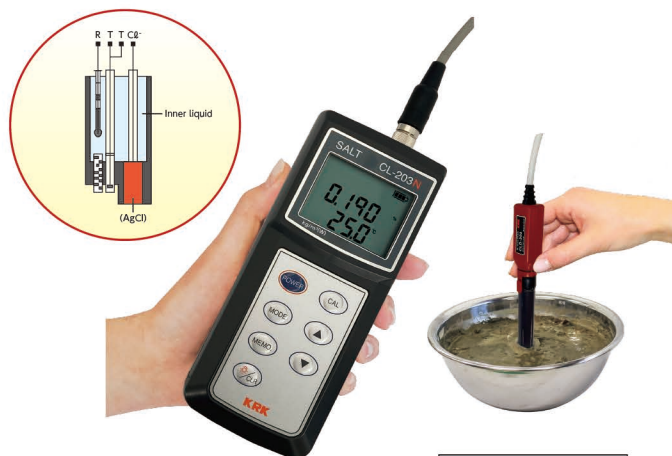
SALT-METER

CL-203N

(Range : 0~1.000% Cl⁻)

4

Salinity Measurement of Fresh Concrete



◆Features

◆Salinity concentration & Chloride content

Salinity concentration: 0.001~1.000% Cl⁻
Chloride content: 0.001~1.999kg/m³ Cl⁻

◆Newly developed long-life electrode

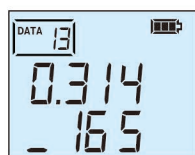
Hg free, A new type of chloride ion electrode

◆Measured value memory function

Max. 30 data

◆Measurements values hold function

Function to temporarily hold measured values



kg/m³ (W)
Upper: Chloride content
Lower: water content



◆Specifications

Product name	Salinity meter for fresh concrete
Model	CL-203N
Measuring range	Salinity : 0.001~1.000% Cl ⁻ (10~10000mg/ℓ) Chloride content : 0.001~1.999kg/m ³ (Cl ⁻) Water temp : 0.0~50.0°C
Resolution	Salinity concentration : 0.001% (Cl ⁻)
Accuracy	Salinity : Within ±10%
water content setting	120~220 kg/m ³
Memory function	Max 30 data
Calibration	LOW calibration : 0.1% (Cl ⁻) soln. HIGH calibration : 0.5% (Cl ⁻) soln.
Power source	DC 4.5V (Alkali battery LR 03×3) Auto Power off System
Self diagnosis function	Self check function, CAL ERR, S ERR, etc.
Dimensions / Weight	Approx 70(W)×173(D)×40(H)mm / 290g

◆Detector

Model	CLD-203
Principle	Chloride ion selective electrode
Cable length	1m
Sample temp	0~45°C
Wetted parts material	PP, PVC, AgCl, Ceramics
Dimensions / Weight	Approx φ17×192mm / 130g
Selectivity	S ²⁻ cannot coexist. CN ⁻ , I ⁻ 10 ⁻⁵ Br ⁻ , S ₂ O ₃ ²⁻ 10 ⁻² NO ₃ ⁻ , SO ₄ ²⁻ , CO ₃ ²⁻ , PO ₄ ³⁻ , F ⁻ 10 ³
Standard component	Meter, Electrode, Std. soln. (0.1%, 0.5% each 250mℓ) Stabilization solution 250mℓ Inner solution 100 mℓ, Carrying case

TRANSPARENCY SENSOR

TP-10Z

(Range : 2~200cm)

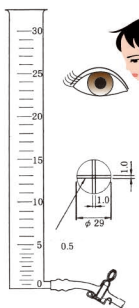
Usage, Waste Water, Septec Tank, River Etc.



Cal. Filter Attached as Std.

Traditional Transparency Meter

Transparency Meter



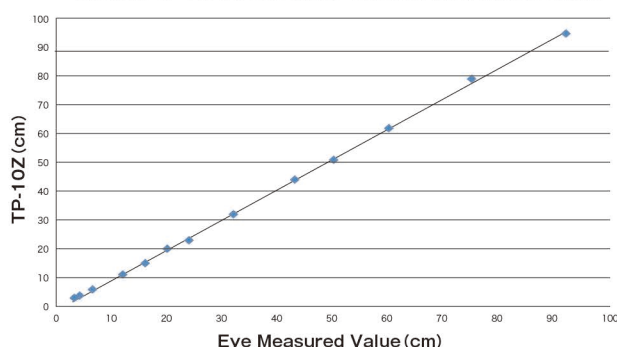
Eye Measured Value
 Mr.A : 45cm
 Mr.B : 48cm
 Mr.C : 40cm

TP-10Z
 Mr.A : 37.3cm
 Mr.B : 37.3cm
 Mr.C : 37.3cm

◆Specifications

Wave length	Near Infrared Ray(880nm)
Display	LCD 4 digits
Range	Transparency : 2.0~200cm Absorbance : 0.000~2.000Abs / 60mm
Minimum resolution	0.1cm(2.0~99.9cm) 1cm(100~200cm) 0.001Abs
Accuracy	Within ±3%(FS) (at fixed condition)
Calibration	① Simple calibration filter ② Equivalent standard solution for calibration

Relation TP-10Z & Traditional Transparency measurement



FLUORIDE ION METER

F-10Z

(Range : 0~2000mg/ℓ)

Solid Membrane Type, Fluoride Electrode Method



FE-1206

◆Highly Sensitive Fluoride Ion Electrode FE-1206

Possible to measure wide range from low to high Density.
 Possible to measure 0.1~1999mg/ℓ linearly.

◆mV Mode

mV Mode makes it possible to measure output of Electrode and to show Electrode is good or not.

◆Measuring Mode Shifts Automatically

Minimum display of 1mg/ℓ at measuring Range 100~2000mg/ℓ
 Minimum display of 0.1mg/ℓ at less Than 99.9mg/ℓ

◆Specifications

Measuring Range	F ⁻ : 0~2000mg/ℓ (F ⁻ : Density of Fluoride Ion) mV : 0~±1000mV (Fluoride Ion Electrode potential)
Resolution	F ⁻ : 0.1mg/ℓ (at 0.0~99.9mg/ℓ) 1mg/ℓ (at 100~2000mg/ℓ) mV : 1mV
Repeatability	F ⁻ : within ±2mg/ℓ (0.0~99.9mg/ℓ) within ±5mg/ℓ (100~2000mg/ℓ) mV : within ±2mV
Data Memory	Max 30 data
Power Supply	DC4.5V (LR03 battery×3) Auto Power off system (30min)
Outer Dimensions	Approx 70(W)×170(D)×40(H)mm
Weight	Approx 290g

◆Fluoride Ion electrode

Product Name/Model	Fluoride Ion Electrode : FE-1206
Measuring Method	Ion Electrode Method (Lanthanum Fluoride Membrane)
Cable length	1m standard
Outer dimensions / Weight	Approx φ18×155mm / 120g
Selectivity	OH ⁻ =10 ¹ HPO ₄ ²⁻ , HCO ₃ ⁻ =10 ³ (pH7~8) Cl ⁻ , Br ⁻ , I ⁻ , NO ₃ ⁻ , SO ₄ ²⁻ =10 ⁵

◆Outline

Fluoride Ion Electrode measures Density of Free Fluoride Ion in Water Solution using single Crystal of Lanthanum Fluoride (LaF₃) Membrane as sensitive Membrane. Total Fluoride Density such as Complex of Fluoride compound can not be measured.

MLSS

MLSS/SLUDGE LEVEL METER **SS-10Z/SS-10F**

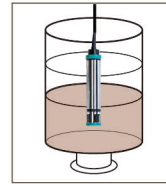
(Range : 0~20000mg/ℓ)

7

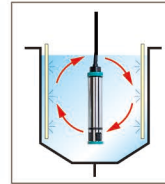
Measurement of Activated Sludge Density/Sludge Level in a Deposit Tank



SS-10Z

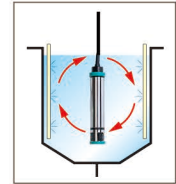


Sludge level /density measurement in the deposit tank



Measurement of activated sludge density

SS-10F



Measurement of activated sludge density

MLSS : 0~20000mg/ℓ
Water depth 0.00~5.00m (max 10m)

MLSS : 0~20000mg/ℓ
(without depth display)

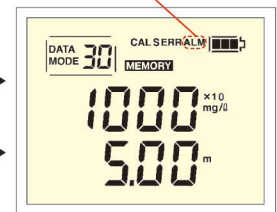
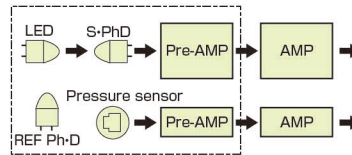
◆Optional Measuring Mode(common to SS-10Z and SS-10F)

MODE

Example)

- Mode 1 Food and dairy Sludge A
- Mode 2 Food and dairy Sludge B
- Mode 3 Sewage /combine Septic Tank A
- Mode 4 Sewage /combine Septic Tank B
- Mode 5 Human waste disposal/deposit Tank A
- Mode 6 Human waste disposal/deposit Tank B

Sludge Level blinking



*SS-10F : without pressure sensor

◆Memory of Measured Value(common to SS-10Z and SS-10F)

Measured Value is memorized if you press MEMO key. Measured Value is called back by using ▲ or ▼ key. Max 30 Data can be memorized and called back.

MEMO



◆Measurement of MLSS & Sludge interface

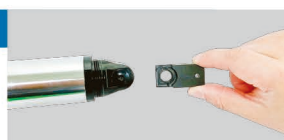
Simultaneous measurement of MLSS and Sludge Level (water depth) (SS-10Z)
Activated sludge density in the Aeration tank and sludge density or Sludge Level (water depth) in deposit tank can be measured at the same Time with a Single Meter. At the Sludge Level, "ALM", "mg/ℓ", "m" blinks and tell The Sludge Level.

◆Specifications

Name / Model	MLSS/Sludge Level Meter : SS-10Z (with Water Depth Measuring Function)
Measuring Method	MLSS : Near-Infrared Pulse Transmission light System Sludge Level (Water Depth) (SS-10Z)
Measuring Range	MLSS : 0~20000mg/ℓ (max 30000mg/ℓ display) Sludge Level : 0~5m (max 10m display) (SS-10Z)
Resolution	MLSS : 10mg/ℓ (within 0~10000mg/ℓ) 100mg/ℓ (within 10000~30000mg/ℓ) Sludge Level : 0.01m (SS-10Z)
Accuracy	MLSS : within ±3%(FS) under certain conditions
Zone Surface Measurement	"ALM", "mg/ℓ" blinks over 15000 mg/ℓ. Water depth display at "ALM", "mg/ℓ" blinking.
Calibration Method	MLSS : ① One-point Calibration (zero calibration only) ② Two-point Calibration (Zero and Span Calibration) ③ 3~4 point Calibration (Zero Span and Middle-Point) Water Depth : Auto Zero Calibration (SS-10Z)
Self diagnosis	Battery Voltage, Detector failure, Calibration err, Scale Over
Memory	Max 30 data
Structure	Dust-Proofed, Water-Proofed, corresponding to IP67
Power Source	DC4.5V(LR03×3) Auto power off after 30 Minutes.
Detector	SSD-10Z (with pressure sensor) SSD-10F (without pressure sensor)
Cable length	6m standard(max 11m)
Standard Accs	Main Body, Detector, Brush, Carrying Case
Optional Accs	Check & Calibration Filter Model CK-1

◆Check & Calibration Filter

Model : CK-1
Install to the MLSS Detector and checking



Turb

8

90° SCATTER LIGHT TURBIDITY METER TR-5Z

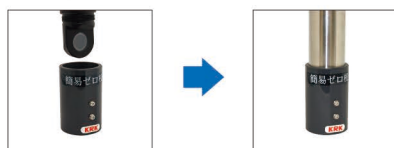
(Range : 0~200 NTU)

Probe Type, Near-Infrared 90° Scatter Light System



◆Zero-calibration is easy with Simple Zero-Calibration Board (Standard)

By using secondary Zero Standard, Simple Zero-Calibration Board, Zero-Calibration Water is not necessary. (for the first Zero Standard, Pure Water is used)



Zero-Calibration container detached

Zero-Calibrated (Calibration Board is set)

◆Specifications

Product Name / Model	Probe Type, Turbidity Meter TR-5Z
Measuring Method	Near-Infrared 90° Scatter Light System
Measuring Range	0~200 NTU (max.220 NTU display)
Measuring Unit (Select)	①Formazine Turbidity (NTU) STD. ②Kaolin Turbidity (mg/ℓ)
Resolution	0.01 / 0~20 NTU 0.1 / 21~220 NTU
Accuracy	Within ±0.2 NTU (Under 20 NTU)
Calibration	Zero Calibration
Self Diagnosis	Battery check, S ERR, CAL ERR, Scale over.
Power Supply	Alkaline Battery LR03×3 (DC4.5V) Auto Power off after 30 Minutes
Dimensions	Meter : Approx 75(W)×180(D)×38(H)mm Detector : Approx φ40×248(L)mm
Weight	Meter : Approx 300g, Detector : Approx 500g
Cable Length	6m standard
Standard Components	Meter, Detector, Measuring container, Vinyl cover Zero calibration container, Carrying case.
Optional Accessories	Turbidity Standard Solution (250mℓ)

Auto Switch of min. Indication

Turbidity of less than 20 NTU indicates 0.01 (display is shifted automatically)



SS/Turb

9

SS/TURBIDITY METER SSTR-5Z

(Range : 0~500 NTU / mg/ℓ)

Near-Infrared 90° Scatter Light Method SS/Turbidity Sensor



◆Specifications

Meter	
Product Name / Model	SS / Turbidity Meter SSTR-5Z
Measuring Range	Turb. : 0~500 NTU SS : 0~500mg/ℓ(Calculation Value)
Resolution	0.1 / 0~100 (NTU or SS, mg/ℓ) 1 / 100~500 (NTU or SS, mg/ℓ)
Accuracy	Within ±0.2 of FS (at Constant Condition)
SS Conversion	Capable of setting $y=a+bx$ (x =Turb. y =SS)
Zero Calibration	1st Std : Pure Water 2nd Std : Simplified ZERO Calibration Container
Power Supply	Alkaline Battery LR03×3 (DC4.5V) Auto Power off after 30 Minutes
Standard Components	Turbidity Meter, Detector, Simplified ZERO calibration container, Vinyl cover, Carrying case,
Optional Accessories	Turbidity standard solution (250mℓ)
Detector	
Model	TRD-120Z
Measuring Principle	Near-infrared, 90° Scatter Light Method
Material	PVC, Crystal Glass, SUS-304
Cable	6m Standard
Weight	Approx 500g
Option	Turbidity Standard Solution : 250mℓ Calibrating & Measuring Container

Shift Between SS Density and Turbidity Measurement

Optionally measure SS (suspended Solid) and turbidity.



There is the correlation between SS (suspended solid) among effluent and Scatter Light Turbidity. We found the correlation factor (y) between SS and Scatter Light Turbidity, which is $y = a + bx$ and by setting this factor, Turbidity can be calculated as SS Density, therefore, SS by SS mode and Density by Density mode can be measured sensitively.

◆Possible to have One or Two Point Calibration with SS Density value of Sample Water

Possible to have Span Calibration with SS Density Value of Sample Water after Manual Analysis.

Turb

TURBIDITY METER

TR-55

(Range : 0~1000FTU)

10**90° Scatter Light / Transmitting Light System**

◆Measuring Outline

Paralleled bundle of Light from LED is decreased by Turbidity substance and reaches to transmitting Light Receiver. The Receiver placed at the 90 degrees against Light Source Measures scattered Light produced in proportion to Turbidity Substance at the Same Time, and measures exactly the Turbidity from low Density to high Density.

◆Near-Infrared Turbidity Detector without outer disturbance Influence

Near-Infrared Pulse Lighting /cutting filter of Visible Light is installed, therefore, less influenced by the outer Light or Colority of the Sample.

Measuring range 0~1100FTU
 Minimum Display 0.01(Under 11FTU)
 0.1(Under 110FTU)

◆Specifications

Product Name / Model	Turbidity Meter TR-55
Measuring Range	0~1100(Degree)
	3 steps Auto-Range shift
Measuring Unit	Formazine Turbidity
Display	LCD 3·1/2 digits
Resolution	0.01 / 0~10.99 0.1/11.0~109.9 1/110~1100
Accuracy	Within ±2% (Under FS : 100FTU) Within ±3% (Under FS : 1000FTU)
Auto Power off	After Display of the measured value for 5 seconds
Sample value	10mℓ
Power Supply	Alkaline Battery LR03×4 (DC6V)
Dimensions	Approx 88(W)×174(D)×65(H)mm
Weight	Approx 310g
Standard components	Turbidity Meter, Standard Solution : 100 / 10 each 30mℓ Measuring Cell 4 pcs, Carrying Case,
Optional Accessories	Mixed Polystyrene Turbidity Solution : 100 or 10 each 60mℓ Formazine Turbidity Std. : 100FTU or 10 each 60mℓ

◆3 Steps Auto-Range Changing System

Stable ZERO Calibration
by Special Cell

Reliable measuring Value
by Special Cell

**Turb/CR**

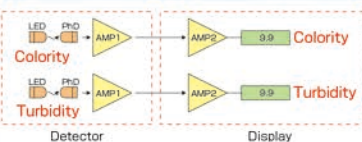
TURBIDITY AND COLORITY SENSOR

TCR-30

(Range : 0~50.0 Degree)

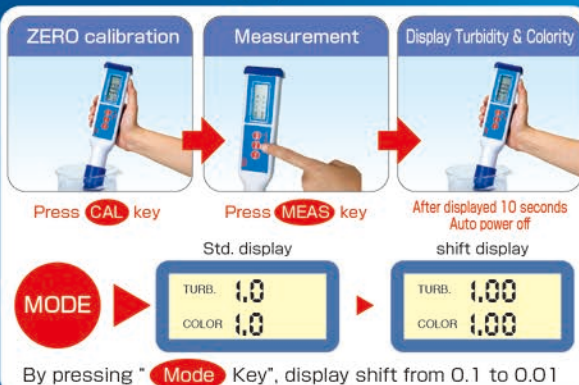
11**One Single Instrument measures Turbidity & Colority at the same time**

◆Measuring System Drawing



◆Double-Beam Type Optical Turbidity & Colority Detector

TCR-30 : Measuring Operation



◆Specifications

Measuring Method	Double beam, Transparency Light System
LCD Display	Upper : Turbidity Display Lower : Colority Display Auto-Power-off after displayed 10 Seconds
Measuring Range	Turbidity : 0.0~50.0 (Degree) Colority : 0.0~50.0 (Degree)
Resolution	MODE 1 : 0.1 Degree MODE 2 : 0.01 Degree (at under 9.99) (Press the MODE key Switch : 0.00 ⇒ 0.0 ⇒ 0.00 ⇒ ...)
Power Supply	Alkaline Battery LR1×4 (DC6V)
Dimensions	Approx 48(W)×320(D)×38(H)mm
Weight	Approx 300g
Optional Accessories	Turbidity Standard Solution (250mℓ) Colority Standard Solution (250mℓ)

◆Use Applications

Water filtration Plant, Simple Water Supply System, Industrial water, plant effluent, Food Plant, Laboratory, Water Quality Test of River Water, etc.

Turb/CR

TURBIDITY AND COLORITY SENSOR

TCR-5Z

(Range : 0~50.0 Degree)

12

One Single Instrument Measures Turbidity & Colority at the Same Time



◆Probe Type, Double Beam Type Turbidity & Colority Detector

Measurement of both Turbidity/Colority (degree) and photometric Absorbance (Abs) is OK by shifting Mode

Measurement of Turbidity/Colority in the Range of 0.0~50.0 degrees, and Abs in the Range of 0.000~1.999 by shifting Mode.

TCR-5Z Operation

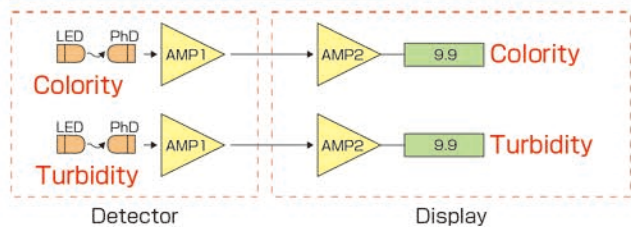
By pressing the "Mode Key" the Display shifts from 0.1 to 0.01.



◆Specifications

Measuring Method	Double beam, Transparency light system
LCD Display	Upper : Turbidity display Lower : Colority display Auto-power-off after displayed 15 Seconds
Measuring Range	Turbidity / Colority : 0.0~50.0(PSL degree) Colority : 0.0 ~ 50.0 (Pt cobalt degree) ABS : 0.000 ~ 1.999 Abs
Resolution	MODE 1 : 0.1 Degree MODE 2 : 0.01 Degree (at under 10) (Press the MODE key Switch)
Power supply	Alkaline Battery LR03×3 (DC4.5V)
Dimensions	Meter : Approx 75(W)×180(D)×38(H)mm Detector : Approx φ34×235(L)mm
Cable length	2m Standard
Optional Accessories	Turbidity Standard Solution (250ml) Colority Standard Solution (250ml)

◆Measuring System Drawing



RC

MULTI-CHLORINE METER

RC-V2

(Range : 0~200g/ℓ)

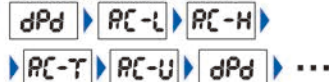
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0.01~200g/ℓ Measurement & Sodium Hypochlorite meter (NaClO)



◆4-Item Measurement with a Single Meter

Measuring Mode changes as follows:



◆5-Item Measurement with a Single Meter

Measurement MODE	Measuring Object	Reagent Model
DPD MODE	Free Chlorine	DPD-F-1
	Total Chlorine	DPD-TL-1
RC-L MODE	Middle Density Chlorine	HOC ℓ -K-1
RC-H MODE	High Density Chlorine	HOC ℓ -K-1
RC-T MODE	High-High Density Chlorine	HOC ℓ -K-1 HOC ℓ -K-2
RC-U MODE	Ultra High Density Chlorine	HOC ℓ -K-1 HOC ℓ -K-2 HOC ℓ -K-3

◆Reagent for Various kind of Measurement

Powdered Reagent is packed separately in Aluminum Pack and excellent for Long-Term Storage To collect Reagent, exclusive Micro Pipette (optional) is recommended.

LOW Density	Middle Density	High Density	High-High Density	Ultra-High Density
DPD mode	RC-L mode	RC-H mode	RC-T mode	RC-U mode
300 dPd	200 RC-L	300 RC-H	3000 RC-T	2000 RC-U
F.S. 3mg/ℓ	F.S. 20mg/ℓ	F.S. 300mg/ℓ	F.S. 3000mg/ℓ	F.S. 200g/ℓ

◆Specifications

ProductName & Model	Multi-Range Chlorine Meter RC-V2
Measuring Method	Absorbancy Method
Measuring Range	DPD Mode : 0.00~3.00mg/ℓ RC-L Mode : 0.0~20.0mg/ℓ RC-H Mode : 0~300mg/ℓ RC-T Mode : 0~3000mg/ℓ RC-U Mode : 0.0~200.0g/ℓ (or 0.00~15.00%)
Memory Function	Max 19 measured Value
Self Diagnosis	Battery Check, ERR, Scale Over, CAL ERR, etc..
Power Supply	Alkaline Battery LR03×4 (DC 6V) Auto Power off after 30min.
Dimensions / Weight	Approx 88(W)×174(D)×65(H)mm / 310g
Standard Components	RC-V2, Measuring Cell : 4pcs, Syringe, Carrying Case
Optional Accessories	DPD Free Chlorine Reagent : DPD-F-1 100 Tests / 1bag DPD Total Chlorine Reagent : DPD-TL-1 100 Tests / 1bag : HOC ℓ -K-1 100 Tests / 1bag : HOC ℓ -K-2 100 Tests(500ml ×2) : HOC ℓ -K-3 100 Tests(500ml ×2) Macro Pipette 10ml : recommend to use Micro Pipette 1ml : for RC-T, RC-U Mode Micro Pipette 0.2ml : for RC-U Mode Spare Measuring Cell 4pcs/sets

※These Optional Accessories are needed in Measuring

RC

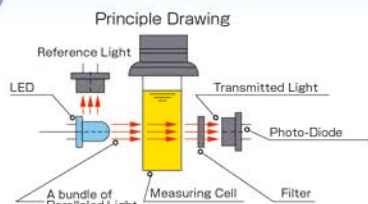
HIGH DENSITY CHLORINE METER

RC-3F

(Range : 0~500mg/ℓ)

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0~500mg/ℓ Measurement



◆Applications

1. Food Factory, Lunch cooking Center, Hospital etc... for Residual Chlorine Inspection of Chlorine Sterilization Water.
2. Swimming Pool, Cooling Tower, Culture, Vegetables for Residual Chlorine Inspection of Sterilization Treated Water
3. City Water, Under-Water, River Water, for Inspection of Residual Chlorine
4. HACCP Teated Waste water for Residual Chlorine
5. Food Plant (processing Milk, Ham, Fish, Meat, Eggs)
6. Other Process control using Sodium Hypochlorite Solution or Electrolytic Hypogenerated Water for Sterilization.

◆Specifications

Measuring principle	Light absorbance method
Measuring object	High density Chlorine (Hypochlorite solution, Electrolytic hypogenerated)
Measuring range	0~500mg/ℓ
Resolution	1mg/ℓ
Error message	Blinking indication at over 500mg/ℓ Low battery voltage display : BAT ERR Inferior zero calibration display : CAL ERR
Auto power-off	After display of the measured value for 5 seconds
Power supply	Alkaline dry battery (LR03)×4,(DC6V)
Dimensions	Approx 75(W)×180(D)×38(H)mm
Weight	Approx 500g(main body)
Standard accessory	Measuring cell with cell cap : ×2 sets packed powdery reagent for High density chlorine model : HOC&K-1(for 100 tests) : ×1 pipette 5ml : ×1 carrying case : ×1
Optional accessory	packed powdery reagent for High density chlorine model : HOC&K-1(for 100 tests) : ×1

Measuring operation



RC

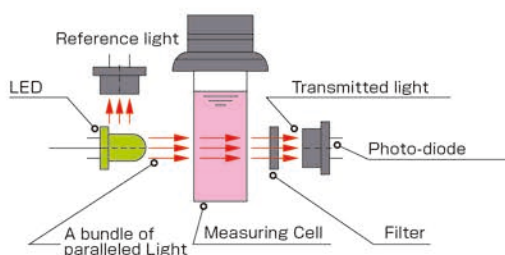
DPD METHOD CHLORINE METER

DP-3F

(Range : 0~5mg/ℓ)

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0~5mg/ℓ Measurement



◆Outline

Residual chlorine reacts with DPD reagent and becomes pink ~ pinkish Red Color. This Color is measured by a colori-meter of light absorbance method, and after being changed to the residual chlorine and it is displayed digitally.

◆Specifications

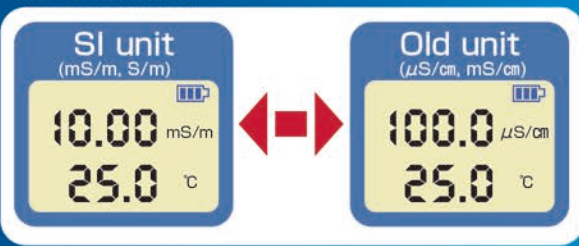
Measuring principle	Light Absorbance Method by DPD Reagent Coloring
Measuring Object	Free Residual Chlorine(Standard) Total Residual Chlorine (by optional Reagent)
Measuring Range	0.00~5.0mg/ℓ
Resolution	0~2.99mg/ℓ : 0.01mg/ℓ 3~5mg/ℓ : 0.1mg/ℓ
Error Message	Blinking LCD Display at over 5mg/ℓ Low Battery Voltage Display : BAT ERR Inferior Zero Calibration Display : CAL ERR
Auto Power-off	After Display of the measured Value for 5 Seconds
Power Supply	Alkaline dry Battery(LR03)×4,(DC6V)
Dimensions	Approx 75(W)×180(D)×38(H)mm
Weight	Approx 500g(main body)
Standard Accessory	Measuring Cell with Cell Cap(rubber) : ×2 sets DPD packed Powdery Reagent for Free Residual Chlorine Model : DPD-F-1(for 100 Tests) : ×1 Carring Case : ×1
Optional Accessory	DPD packed Powdery Reagent for Free Residual Chlorine Model : DPD-F-1(for 100 tests) : ×1 DPD packed Powdery Reagent for Total Residual Chlorine Model : DPD-TL-1(for 100 Tests) : ×1

O₃**DISSOLVED OZONE METER****O₃-3F**
(Range : 0~3mg/ℓ)**16****◆Outline**

This is Dissolved Ozone Meter of Light Absorbance Method, which enables to measure Ozone Density up to high Density of 3mg/ℓ existing in the sterilized or oxidized Liquid.
Measuring Reagent is a packed Special Powder Reagent and can measure Ozone Density speedily and precisely. The measuring Principle is the Light Absorbance Method with LED as Light Source and Photo-Diode as Light Receiver. Which is also the Newest, High Efficient, Light Absorbance Ozone Density Meter.

◆Specifications

Measuring Principle	Light Absorbance Method by O ₃ Reagent Coloring
Measuring Object	Dissolved Ozone Density
Measuring Range	0.00~3.00mg/ℓ
Resolution	0.01mg/ℓ
Error Message	Blinking LCD display at over 3mg/ℓ Low Battery Voltage Display : BAT ERR Inferior Zero Calibration Indicates : CAL ERR
Auto Power-off	After display of the Measured Value for 5 Seconds
Power Supply	Alkaline Battery (LR03)×4, (DC6V)
Dimensions	Approx 75(W)×180(D)×38(H)mm
Weight	Approx 500g(main body)
Standard Accessory	Measuring Cell with Cell Cap : ×2 Sets Packed Powderly Reagent for Dissolved Ozone model : OZ-K-1 (for 100 Tests) : ×1 Pipette 5ml : ×1 Carring Case : ×1
Optional Accessory	Packed Powder Reagent for Dissolved Ozone model : OZ-K-1 (for 100 Tests)×1

EC**ELECTRIC CONDUCTIVITY METER****EC-5Z****17****High Chemical Proof Carbon Electrode Type, Electric Conductivity Sensor****Convenient Switch Function of SI Unit and Conventional Unit****◆Possible to measure Electric Conductivity, Salt Density, and Temperature**

Sensitive EC Sensor of measuring from Low to High Density

◆Specifications

Product Name	Conductivity Meter	
Model	EC-5Z-H(For high density)	EC-5Z-L(For Low Density)
Std. Electrode	ECD-4C(Cell Constant : 400m ⁻¹) ※Conventional unit : 4.0cm ⁻¹	ECD-1C(Cell Constant : 100m ⁻¹) ※Conventional Unit : 1.0cm ⁻¹
Method	AC 2 Electrode System	
Display	LCD 4 digits 2 stages (Upper : Conductivity : lower : TEMP)	
Measuring Range	①0~20 S/m : SI Unit ②0~200 mS/cm : Old Unit ③0~10% NaCl ④0~100℃	①0~2 S/m : SI Unit ②0~20mS/cm : Old Unit ③0~1.2% NaCl ④0~100℃
Display Range (Resolution)	① SI Unit conductivity 0.0~999 mS/m 1.000~9.999 S/m 10.00~20.00 S/m ② Old Unit Conductivity 0.0~999 mS/m 1.000~9.999 mS/cm 10.00~99.99 mS/cm 100.0~200.0 mS/cm ③Salinity : 0.00~10.00 NaCl ④Temp : 0.0~100℃	① SI Unit conductivity 0.0~99.99 mS/m 100.0~9.999 mS/m 1.000~2.000 S/m ② Old Unit Conductivity 0.0~999.9 μS/m 1.000~9.999 mS/cm 10.00~20.00 mS/cm ③Salinity : 0.00~1.20 NaCl ④Temp : 0.0 ~ 100℃
Power Supply	Alkaline battery LR03×3 (DC4.5V)	
Dimensions / Weight	Meter : Approx 75(W)×180(D)×38(H)mm / 300g	

◆Detector

Model	ECD-4C(For high density)	ECD-1C(For low density)
Cell constant	400m ⁻¹ (SI Unit) 4.0cm ⁻¹ (Old Unit)	100m ⁻¹ (SI Unit) 1.0cm ⁻¹ (Old Unit)
Measuring range	0.1mS/m~20 S/m (SI Unit) 1μS/cm~200 mS/cm (Old Unit)	0.01mS/m~2 S/m (SI Unit) 0.1μS/cm~20 mS/cm (Old Unit)
Temperature	0~100℃	
Material	PPS, PP, FKM, Carbon	

CHL**CHLOROPHYLL SENSOR****CHL-30N**

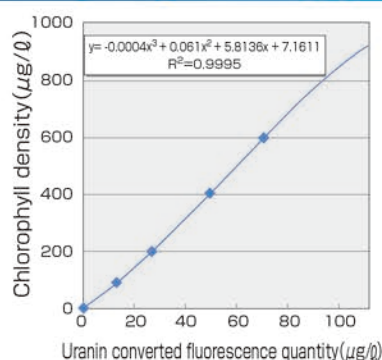
(Range : 0~200µg/l)

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Fluorescence strength sensor



◆Correlation between uranine converted fluorescence quantity and chlorophyll



◆Specifications

Product name	Chlorophyll Sensor
Model	CHL-30N
Measuring object	Chlorophyll a
Measuring range	0.0~200µg/l (Uranine-equivalent fluorescence intensity)
Resolution	0.1µg/l (Uranine-equivalent)
Display	LCD 3·1/2
Measuring principle	Fluorescence measurement method
Measuring wavelength	Excitation wavelength : 410~470nm Fluorescence wavelength : 600~700nm
Repeatability	Within ±2% (F.S.)
Measuring method	Measurement by immersion in sensor section Auto power off after 10 seconds

◆Measurement Overview

Chlorophyll is a chlorophyll found in algae (phytoplankton) and plants living in water bodies such as rivers, oceans, and lakes, and plays an important role in photosynthetic reactions.

Chlorophyll absorbs blue light and emits red light (fluorescence).

The CHL-30N utilizes this property by using a blue excitation light source in the light emitter and a detector that receives red fluorescence in the light receiver, allowing measurement of the fluorescence intensity generated according to the concentration of chlorophyll in living phytoplankton cells. It is suitable for culture tests and simple in-situ measurements of chlorophyll.

The fluorescence intensity varies depending on the type of plankton, etc. Therefore, when determining the absolute value of chlorophyll, it is necessary to determine the correlation with the acetone extraction measurement method, etc.

CHL**CHLOROPHYLL SENSOR****CHL-5Z**

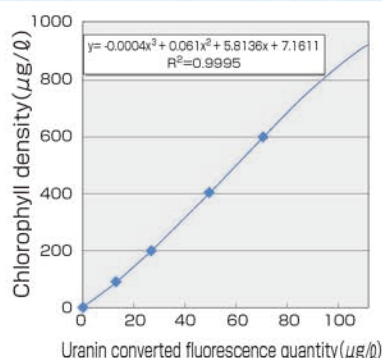
(Range : 0~200µg/l)

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Measurement of fluorescence strength of phytoplankton's chlorophyll.



◆Correlation between uranine converted fluorescence quantity and chlorophyll



◆Specifications

Model	Main body : CHL-5Z Detector : CHLD-120Z (Cable length : 6m)
Measuring object	Chlorophyll a
Measuring range	0.0~200µg/l (Uranine-equivalent fluorescence intensity)
Resolution	0.1µg/l (Uranine-equivalent)
Display	LCD 3·1/2
Measuring principle	Fluorescence measurement method
Measuring wavelength	Excitation wavelength : 410~470nm Fluorescence wavelength : 600~700nm
Repeatability	Within ±2% (F.S.)
Measuring method	Measurement by immersion in sensor section
Power source	DC 6V (Alkali battery LR 03×4)
Standard component	Main body, Detector, Carrying case, Measuring container Alkali battery (LR 03×3)
Optional component	Uranine standard solution(200µg/l) 250ml
Size / weight	Main body : Approx 75(W)×180(D)×38(H)mm / 290g Detector : Approx φ40×250mm / 500g

◆Usage

Environmental surveys of aquaculture farms, fisheries resources research, red tides and water-bloom in oceans, rivers, lakes, etc.

Cu

COPPER METER

CU-5Z
(Range : 0~76.3g/ℓ)**20****for Copper Sulfate Etching Liquid and Plating Liquid**

0.0~76.3g/ℓ [Cu] Measurement



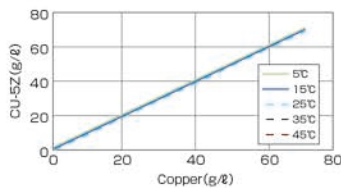
Possible to Select 3 Measuring Mode

mol Density	CuSO ₄ Density	Copper Density
1.200	300	76.3
mol/ℓ	CuSO ₄	Cu
0.000~1.200mol/ℓ	0~300g/ℓ (CuSO ₄)	0.0~76.3g/ℓ (Cu)

◆Features

- Possible to measure High Density Copper Liquid by shifting 3 Modes.
mol Density (0.000~1.200 mol/ℓ)
Copper Sulfate Density (0~300 g/ℓ)
Copper Density (0~76.3 g/ℓ)
- Copper Sensor not influenced by Sulfuric Acid and Hydrogen Peroxide
- Copper Sensor with Reference Light and Automatically controlled LED Light Source

◆Linearity & Temp. Characteristic



◆Technical Information

- Converting Calculation of mol, Copper Sulfate and Copper Density

mol Density (mol/ℓ)	CuSO ₄ Density (g/ℓ)	Copper Density (g/ℓ)
0.050	12	3.2
0.100	25	6.4
0.200	50	12.7
0.800	200	50.8
1.000	250	63.5
1.200	300	76.3

Molecular weight : copper(II)sulfate pentahydrate=249.69
Copper=63.546

Comparison of each density at 1 mol/ℓ	mol density	Copper Density(g/ℓ)	Copper Sulfate Density(g/ℓ)
	1	:	63.546 : 249.69
How to calculate mol Density	mol Density(mol/ℓ)=Copper Density(g/ℓ)÷63.546 =Copper Sulfate Density(g/ℓ)÷249.69		
How to calculate Copper Sulfate Density	Copper Sulfate Density(g/ℓ)=Copper Density(g/ℓ)×3.929 =mol Density×249.69		
How to calculate Copper Density	Copper Density(g/ℓ)=Copper Sulfate Density(g/ℓ)÷3.929 =mol Density×63.546		

◆Specifications

Measuring Range	0.000~1.200 mol/ℓ (mol Density) 0~300g/ℓ (Copper Sulfate Density) 0.0~76.3g/ℓ (Copper Density)
Measuring Unit	①mol/ℓ mol Density ②g/ℓ Copper Sulfate Density ③g/ℓ Copper Density
Resolution	①0.001mol/ℓ mol Density ②1g/ℓ Copper Sulfate Density ③0.1g/ℓ Copper Density
Accuracy	Within ±2%
Calibration	Zero : with Pure Water or distilled Water Span : with Copper standard Solution
Self Diagnosis	Battery Voltage : Battery Mark Detector Error : "S", "ERR" blinks Calibration Error : "CAL", "ERR" blinks Scale Over : Max Value in measuring Range blinks
Sample Water Temperature	0~40℃
Power Supply	Alkaline Battery LR03×3 (DC 4.5V)
Outer Dimensions	Meter : Approx 75(W)×180(D)×38(H)mm Detector : Approx φ40×250mm
Detector Model	CUD-61
Detector Material	Quartz, PPS, SUS-304(PFA coating)
Cable length	2m Standard
Weight	Meter : Approx 300g Detector : Approx 500g (Without cable)
Standard Components	Meter(CU-5Z), Detector(CUD-61), Manual Brush, Alkali Batteries(LR03×3), Carrying Case, Measuring container, Vinyl cover

◆Measurement outline

This Meter indicates Copper Density in the Solution as mol Density (mol/ℓ), Copper Sulfate Density (g/ℓ), and Copper Density (g/ℓ) by calculating the Signals in proportion to Copper Density which comes from Light Absorbance Detector through Converter which is composed of LED of suitable Wavelength for Copper Density Measurement, receiving Optics, Special Optical Window of Chemical-Resistance and Pre-Amplifier.

Ni

NICKEL METER Ni-5Z/Ni-5ZL

(0.0~199.9g/ℓ / 0.00~19.99g/ℓ)

21**Measurement of Nickel Density in Nickel Plating Process**

0.0~199.9g/ℓ (Ni) Measurement

**Possible to select by 3 Measuring Mode****Measures Nickel Density in g/ℓ Unit or Abs Unit**

g/ℓ : 0.00~19.99 g/ℓ (Ni-5ZL)
 0.1~199.9 g/ℓ (Ni-5Z)
 Abs : 0.000~1.999 Abs
 User Mode : original Linearity (0~1999 without Unit)

◆Ni Detector for Low Density Measurement of various Nickel Plating Liquid

Exact Measurement of Nickel Density out of various kinds of plating Liquid such as Nickel Sulfate, Nickel Sulfamate, Nickel Chloride, etc.

◆Excellent Chemical-Resistance and Heat-Resistance

Liquid junction is made of PFA, Quartz, PPS

◆Measuring Outline

This Meter simply and sensitively measures Density of Nickel out of various plating Liquid, such as Nickel Sulfate, Nickel Sulfamate, Nickel Chloride, etc. by g/ℓ, Abs.

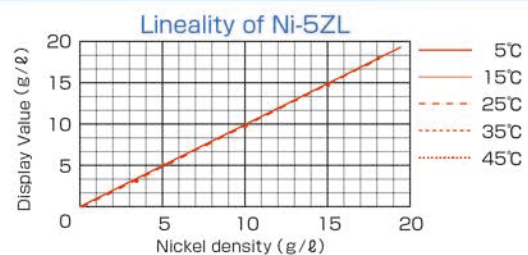
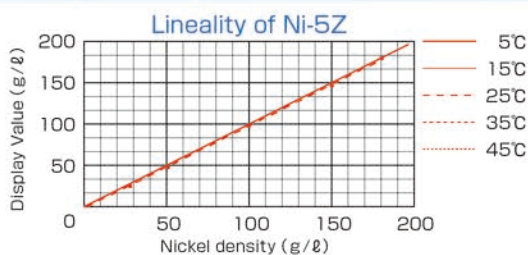
Of course, complicated Operation is not Necessary.
 Meters and Sensors are available for both High Density and Low Density. Optional from measuring Purpose.

◆Specifications

Meter		
Product Name/Model	Ni-5Z For high density	Ni-5ZL For low density
Measuring Range	Ni density : 0.0~199.9g/ℓ Absorbance : 0.000~1.999 Abs User mode : 0~1999 (Non-unit)	0.00~19.99g/ℓ
Temp. compensation	Automatic	
Accuracy	Within ±2% of F.S. (at constant condition)	
Calibration	ZERO : with distilled water SPAN : with Ni Standard solution	
Self diagnosis	Battery check, CAL ERR, ERR etc.	
Power supply	Alkaline battery LR03×3 (DC 4.5V) Auto power off after 30 minutes	
Outer dimensions	Meter : Approx 75(W)×180(D)×38(H)mm	
Weight	Approx 300g	
Standard components	Meter, Detector, Manual, Measuring container, Brush, Alkali batteries(LR03×3), Carrying Case, Vinyl cover	
Optional Accessories	Nickel standard solution 250mℓ	

◆Detector

Product Name/Model	CUD-61 For high density	NID-61L For low density
Measuring Principle	Light absorbance method	
Cable length	2m	
Material	SUS-304(PFA coating), PPS, Quartz	
Sample condition	Temp : within 0~45°C pH : 1.0 ~ 6.5 (Acidity bath)	
Weight	Approx 165g	

◆Linearity and Temperature Characteristic



(Cu Liquid) (Ni Liquid)

Measurement of both Copper and Nickel Density with a Single Meter

Measures Density of Both Copper and Nickel by shifting Measuring Mode.

※No measurement if Copper and Nickel exist at the Same Time.

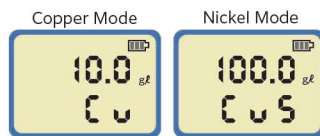


Possible to measure Copper and CuSO₄ Density with just Single Instrument

Measurement of both Copper Density and Copper Sulfate Density with a Single Meter

Copper (Cu)
Density : 0~80g/ℓ

Copper Sulfate (CuSO₄)
Density : 0~300g/ℓ



◆Possible to measure 6-Items by selecting 6 Mode

Such as Cu, CuSO₄, Ni, Abs, User Mode, Temperature

Density Measurement of Copper and Nickel by Absorbance

Density is controlled by Absorbance (Abs).



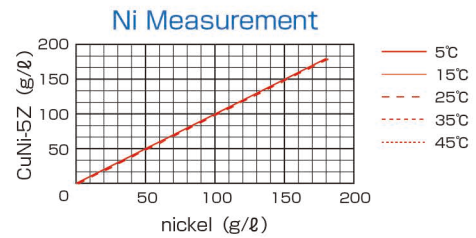
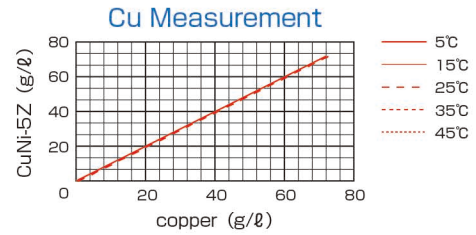
Measurement and Calibration by User Mode

Original linearity, Value and Measuring Unit can be set.

e.g. %, mol, g/ℓ



◆Linearity & Temp Characteristic



◆Specifications

Product Name / Model	Nickel / Copper Meter CuNi-5Z
Measuring Object	Cu & Ni Measurement in Sulfuric acid Copper Etching / Nickel Plating Liquids
Measuring Principle	Absorbance Method
Measuring Range	Cu : 0.0~80.0g/ℓ CuSO ₄ : 0~300g/ℓ Ni : 0.0~199.9g/ℓ Abs : 0.000~1.999 Abs User Mode : 0~1999 (Non-Measuring unit) Temp : 0.0~50.0°C
Accuracy	Within ±2% of F.S. (at constant Condition)
Span Calibration	By Cu or Ni Standard Solution
Self Diagnosis	Battery Check, CAL ERR, ERR etc.
Power Supply	Alkaline Battery LR03×3 (DC 4.5V) Auto Power off after 30 Minutes
Outer Dimensions	Meter : Approx 75(W)×180(D)×38(H)mm
Weight	Approx 300g
Standard Components	Meter(CuNi-5Z), Detector(CUD-61), Manual, Brush, Alkali Batteries(LR03×3), Carrying case Measuring container, Vinyl cover.
Optional Accessories	Cu or Ni : standard solution 250ml

◆Detector

Product Name	Copper / Nickel Detector
Model	CUD-61(For high Density)
Material	PFA, PPS, Quartz.
Sample Condition	0 ~ 45°C
Dimensions / Weight	Approx φ40×250mm / 500g
Cable	2m

◆Measuring Sensor of Copper and Nickel with excellent Chemical-Resistance

This Meter measures PC, PPIC, Density of Copper and Nickel out of the Copper Sulfate Plating Liquid, or Nickel Plating Liquid in the Field of Electronic Part industry by the Sensitive Absorbance Method. This is also a very convenient Copper and Nickel Density Meter with Temperature Measurement by Light Absorbance.

Cu^T

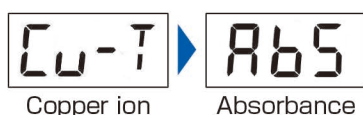
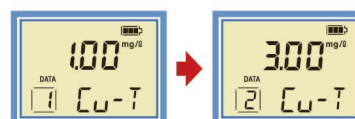
Copper Ion Meter

Cu-V2
(Range : 0~10mg/ℓ)**23**

Water quality inspection of Copper Ion for plating & Etching Process

**◆Specifications**

Measuring Method	Absorbance method by Bicinchoninic Acid
Measuring Range	①Copper ion density : 0.00~10.00mg/ℓ(Cu ^T) ②Absorbance : 0.000~2.000Abs
Repeatability	Within ±5%(F.S.)
Memory Function	Max 19 items
Self diagnosis	Battery voltage shortage, Abnormal calibration, Scale over
Sample Water Quantity	10mℓ
Measuring Time	Within 3 min.
Power Source	DC 6V(Alkali battery LR 03×4)
Outer Size / Weight	Approx 80(W)×174(H)×65(D)mm / 200g
Standard Component	Meter(Cu-V2), Measuring cell (with cover)×4 Measuring reagent : Cu-V2-RA 50 times, Carrying case, Instruction Manual, Written guarantee, Pipette (5mℓ), Alkali battery (LR 03×4)
Optional Component	Macro pipette (10mℓ)
Selectibility	No coexistence of Al, Fe ³⁺ , CN ⁻ , coloring, turbidity, SS, oxidizing substances.

◆Copper Ion & Abs can be measured with one single instrument**◆With memory Function****Ni²⁺**

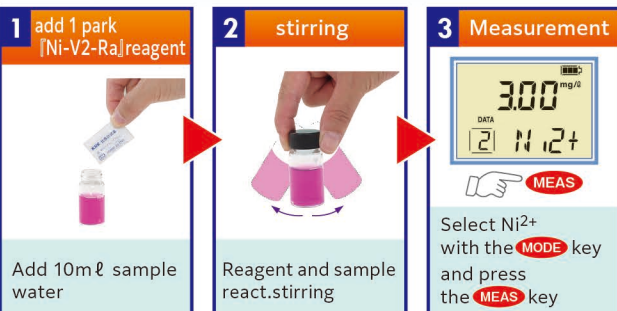
Nickel Ion Meter

Ni-V2
(Range : 0~10mg/ℓ)**24**

Water quality inspection of Nickel Ion for plating Process

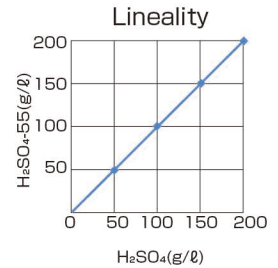
**◆Specifications**

Measuring Method	Absorbance method by Nioxime
Measuring object	Nickel Ion (Ni ²⁺)
Measuring Range	①Nickel ion density : 0.00~10.00mg/ℓ(Ni ²⁺) ②Absorbance : 0.000~2.000Abs
Repeatability	Within ±5%(F.S.)
Memory Function	Max 19 items
Self diagnosis	Battery voltage shortage, Abnormal calibration, Scale over
Sample Water Quantity	10mℓ
Measuring Time	Within 3 min.
Power Source	DC 6V(Alkali battery LR 03×4)
Outer Size / Weight	Approx 88(W)×174(H)×65(D)mm / 200g
Standard Component	Meter(Ni-V2), Measuring cell (with cover)×4 Measuring reagent : Ni-V2-RA 50 times, Carrying case, Instruction Manual, Written guarantee, Pipette (5mℓ), Alkali battery (LR 03×4)
Optional Component	Macro pipette (10mℓ)
Selectibility	No coexistence of Cr ³⁺ , Fe ³⁺ , Co ²⁺ , Cr ⁶⁺ , CN ⁻ , Fe ²⁺ , Cu ²⁺ .

**◆Nickel Ion & Abs can be measured with one single instrument**

H₂SO₄**SULFURIC ACID METER****H₂SO₄-55**
(Range : 0~200g/ℓ)**25****Measurement of H₂SO₄ Density for Plating & Etching Process Liquid**

This Meter directly measures high Density Sulfuric Acid out of Etching Liquid etc. Complicated Dilution or Calculation is not necessary. Sulfuric acid Density Meter of Simple Operation. Measuring Object is not Sulfuric Ion but Sulfuric Acid Density.



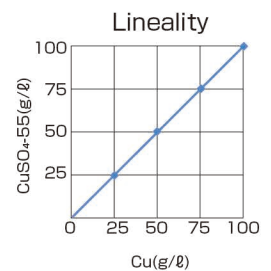
- 1 : Possible to measure Sulfuric Acid Density by 0 ~ 199g/ℓ
- 2 : Colorimetric Measurement of high Density H₂SO₄ within 1 min.
- 3 : Simple Operation by just Single Reagent

◆Specifications

Product Name	Sulfuric Acid Meter
Model	H ₂ SO ₄ -55
Measuring Method	Light Absorbance Method
Measuring Range	0.0~199.9g/ℓ(H ₂ SO ₄)
Display	LCD 3·1/2 digits
Power Supply	Alkaline battery LR03×4(DC 6V)
Outer Dimensions	Approx 88(W)×174(D)×65(H)mm
Weight	Approx 310g
Standard Components	Instrument(H ₂ SO ₄ -55), Measuring cell(4pcs), Reagent : H ₂ SO ₄ -RA 500mℓ(50 tests), Carrying Case, Micro-Pipette 0.1mℓ
Optional Accessories	Macro-Pipette 10mℓ

Cu**COPPER METER****CuSO₄-55**
(Range : 0~120g/ℓ Cu)**26****Measurement of Copper Sulfate for Plating & Etching Process Liquid**

This Meter directly measures high Density Copper (Cu) out of Etching Liquid etc. Complicated Dilution or Calculation is not necessary. Copper Density Meter of Simple Operation. Not-Dissolved Copper Can not be measured.



- 1 : Possible to measure Cu Density by 0 ~ 120g/ℓ
- 2 : Colorimetric measurement of high Density Cu within 1 min.
- 3 : Simple Operation by just Single Reagent

◆Specifications

Product Name/Model	Copper Meter
Model	CuSO ₄ -55
Measuring Method	Light Absorbance Method
Measuring Range	0.0~120.0g/ℓ(Copper sulfate density)
Resolution	0.1g/ℓ(0.01%)
Power Supply	Alkaline battery LR03×4(DC 6V)
Outer Dimensions	Approx 88(W)×174(D)×65(H)mm
Weight	Approx 310g
Standard Components	Instrument(CuSO ₄ -55), Measuring cell(4pcs), Reagent : CuSO ₄ -RA 500mℓ(50 tests), Carrying Case, Micro-Pipette 0.1mℓ
Optional Accessories	Macro-Pipette 10mℓ

Density

27

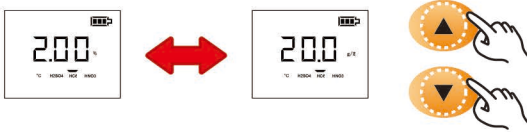
Chemical Liquid DENSITY METER LQ-5Z-MULTI

TMAH, NaOH, Na₂CO₃, NH₃, H₂SO₄, HNO₃, HCl, Temperature



◆ Possible to measure density of single ingredient by indicating % and g/ℓ

Example) HCl density 1.00% ⇔ 10.0g/ℓ



◆ Possible to measure density of 7 items separately with this meter.

Acid liquid : sulfuric acid, hydrochloric acid, nitric acid
Alkali liquid : TMAH, sodium hydroxide, sodium carbonate, ammonia, water Temperature

Measuring example



◆ Specifications

Product Name	Density Meter for single ingredient
Model	LQ-5Z-Multi
Measuring method	Electrode Method (collecting liquid)
Measuring Range	Alkali liquid TMAH : 0.00~5.00%/0.0~50.0g/ℓ NaOH : 0.00~3.00%/0.0~30.0g/ℓ Na ₂ CO ₃ : 0.00~10.0%/0.0~100g/ℓ NH ₂ : 0.00~2.00%/0.0~20.0g/ℓ Acid liquid H ₂ SO ₄ : 0.00~2.00%/0.0~20.0g/ℓ HNO ₃ : 0.00~2.00%/0.0~20.0g/ℓ HCl : 0.00~2.00%/0.0~20.0g/ℓ Temperature : 0~40℃
Liquid temp / range	0~40℃
Accuracy	Within ±2% FS (under same condition)
Power Source	DC 4.5V (alkali battery LR-03×3)
Dimensions / Weight	Meter : Approx 75(W) × 38(H) × 180(D)mm / 290g Electrode : Approx φ17×180(L)mm / 50g
Standard Components	Meter, Electrode, Batteries

◆ Acid and alkali proofed Sensor

Possible to measure high density liquid without dilution
No use of reagent for measurement

◆ Usage

Chemical plant, pharmaceutical plant, process of semiconductor and LCD production, density control of washing water and diluted liquid, etc.

Density

28

Chemical Liquid DENSITY METER LQ-5Z series

Chemical-proof electrode type liquid density meter for single ingredient



With this sensor, you can measure liquid density without using any reagent.



◆ Remarks

These meters Measure only liquid Density of single Ingredient. These are not for Measurement of Liquid Density which contains several Ingredients. For Measurement of other Liquid than mentioned above (e.g. Hydrochloric acid. Sodium Carbonate. etc.) we are ready for your requirement.

◆ Specifications

TMAH TMAH Meter LQ-5Z-TMAH Measurement 0.00~5.00% 0~40℃	H₂SO₄ Sulfuric Acid Meter LQ-5Z-H₂SO₄ Measurement 0.00~2.00% 0~40℃	HNO₃ Nitric Acid Meter LQ-5Z-HNO₃ Measurement 0.00~2.00% 0~40℃
KOH Potassium hydroxide Meter LQ-5Z-KOH Measurement 0.00~3.00% 0~40℃	NaOH Sodium Hydroxide Meter LQ-5Z-NaOH Measurement 0.00~3.00% 0~40℃	NH₃ Ammonium Sodium Meter LQ-5Z-NH₃ Measurement 0.00~2.00% 0~40℃

H₂O₂**HYDROGEN PEROXIDE METER H₂O₂-V1/V2/V3****(Range : 0~120g/ℓ/1200mg/ℓ 25mg/ℓ)****29****Measurement of H₂O₂ Density for Plating & Etching Process Liquid****◆Specifications**

Model	H ₂ O ₂ -V1	H ₂ O ₂ -V2	H ₂ O ₂ -V3
Measuring Object	High Density	Middle Density	Low Density
Measuring Method	Light Absorbance Method		
Display	LCD 4 digits		
Measuring Range	0~120g/ℓ	0~1200mg/ℓ	0~25mg/ℓ
Resolution	0.1g/ℓ	1mg/ℓ	0.01mg/ℓ
Measuring time	Approx 1 minute		
Reagent	H ₂ O ₂ -V1-RA	H ₂ O ₂ -V2-RA	H ₂ O ₂ -V3-RA
Memory	Max 19 measured Value		
Self Diagnosis	Battery Check, ERR, Scale over CALERR, etc...		
Power Supply	Alkaline Battery (LR03×4, DC6V)		
Dimensions / Weight	Approx 88(W)×174(D)×65(H)mm / 310g		
Macro Pipette or Pipette	0.1mℓ 10mℓ	0.1mℓ 10mℓ	0.1mℓ 10mℓ
Standard Components	Main body, Measuring Cell : 4 pcs, Carrying Case Micro Pipette : 0.1mℓ Reagent : 50 tests		

◆Use Applications**High Density H₂O₂-V1 : 0~120g/ℓ**

- Measurement of Hydrogen Peroxide 0~120g/ℓ
- H₂O₂ measurement of plating liquid, etching liquid and disinfectant liquid

Middle Density H₂O₂-V2 : 0~1200mg/ℓ

- Measurement of Hydrogen Peroxide 0~1200mg/ℓ
- H₂O₂ measurement of plating liquid, etching liquid and disinfectant liquid

Low Density H₂O₂-V3 : 0~25mg/ℓ

- Measurement of Hydrogen Peroxide 0~25mg/ℓ
- H₂O₂ measurement of plating liquid, etching liquid and disinfectant liquid

◆Measuring Outline

This Meter directly measures high Density Hydrogen Peroxide out of Copper Sulfate Etching Liquid or Nickel Etching Liquid. Not influenced by Sulfuric Acid, Hydrochloric Acid, Copper, Nickel, etc. Complicated Dilution or Calculation is not necessary. Measuring Operation is simple and easy to operate.

Cl⁻**CHLORIDE ION METER CLCU-55****(Range : 0~200mg/ℓ)****30****Possible to measure Chloride Ion Density in copper plating Liquid without influenced Copper or CuSO₄****◆Specifications**

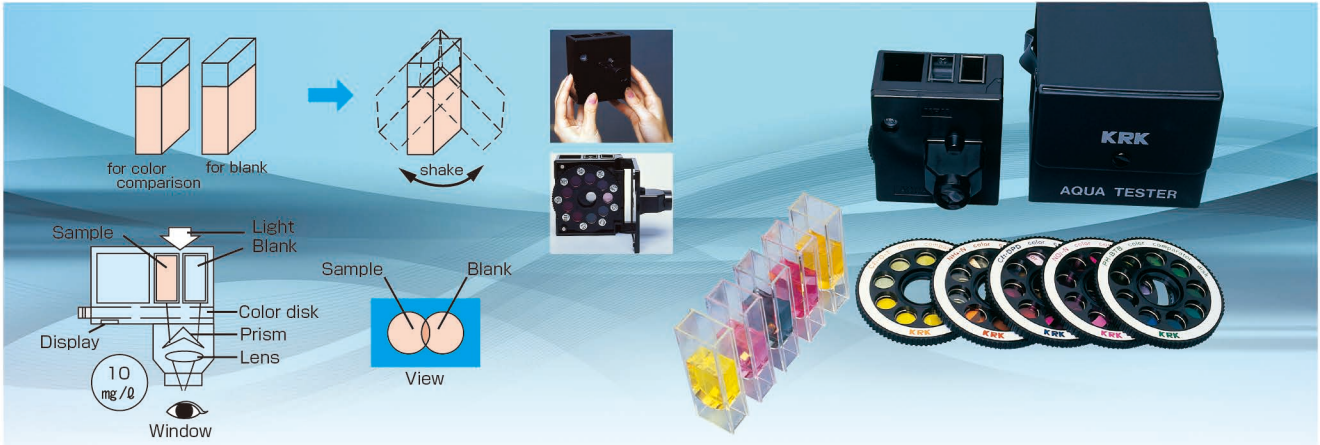
Product Name	Chloride Ion Meter
Model	CLCU-55 (for High Density)
Measuring Method	Chloride Ion Measurement in Copper Plating Liquid
Measuring Range	0.0~199.9mg/ℓ
Resolution	0.1mg/ℓ
Measuring time	Approx 3 min.
Power Supply	Alkaline battery LR03×4(DC 6V)
Outer Dimensions	Approx 88(W)×174(D)×65(H)mm
Standard Components	Instrument, Measuring cell(4pcs), Reagent : CLCU-RA-H 500mℓ(50 tests), Carrying Case, Micro-Pipette 0.1mℓ Chloride Ion standard Solution : 50mℓ
Optional Accessories	Macro-Pipette 10mℓ, Filter Paper

◆No Titration nor Calculation is necessary, safe Method by Light.

Harmful Potassium Dichromate is not used.

Q Why is chloride Ion necessary to be measured?

A Too much chloride Ion or short of Chloride Ion in the copper Sulfate Plating Liquid greatly affects the gloss and leveling. Therefore, exact Density of Chloride Ion must be measured and controlled.



◆A unique finder with Prism & Magnification Lens

Because Optics Structure composed of Prism & lens magnifies spectrum-analyzed colors the Accuracy of its Determination has been further improved.

◆Simple to change rotary Colorimetric Disk

So simple Operation for opening & closing the Window as it has Permanent Magnet. Just one touch is O.K. Save Operation time by using such a convenient Apparatus.

9 GRADES COLORIMETRIC DETERMINATION 1Z



◆For example : DP-1Z

Product Name	Chlorine Meter
Model	DP-1Z
Measuring range	9 Grades Determination 0.1/0.2/0.3/0.4/0.5/0.7/1.0/1.5/2.0mg/ℓ(Disk B) or 0.05/0.1/0.2/0.4/0.5/0.7/1.0/1.5/2.0mg/ℓ(Disk A)

10 GRADES COLORIMETRIC DETERMINATION 7Z



◆For example : DP-7Z

Product Name	Chlorine Meter
Model	DP-7Z
Measuring Range	10 Grades Determination 0.05/0.1/0.2/0.3/0.4/0.5/0.7/1.0/1.5/2.0mg/ℓ
Standard Accessory	Tester, Tube : 2pcs Free Chlorine Reagent : DPD-F-1(50 tests/bag)

◆Specifications

No.	Items	Measuring Item	Model	Measuring Range (mg/ℓ)	Steps	Reagent (tests/Q, ty)	Reagent Model
1	Cl ₂	Chlorine	DP-1Z	0.1 ~ 2.0mg/ℓ	9	50/1 bag	DPD-F-1
2	pH/Cl ₂	pH / Chlorine L	DP-2Z	pH : 6.0 ~ 7.6 Cl ₂ : 0.1 ~ 2.0mg/ℓ	9	50/1 bag 36/18ml	DPD-F-1 BTB
3	Cl ₂ /RC	Chlorine H & L	DP/RC-1Z	Cl ₂ : 0.1 ~ 2.0mg/ℓ RC : 50 ~ 100mg/ℓ	6 3	50/1 bag 50/1 bag	DPD-F-1 HOCl-K-1
4	Cl ₂ /RC	Chlorine H	Cl ₂ -1Z-H	RC : 10 ~ 150mg/ℓ (or 20 ~ 300mg/ℓ)	9	50/1 bag	HOCl-K-1
5	Cl ₂ /RC	Chlorine H & L	DP/HOCl-2Z	Cl ₂ : 0.05 ~ 2mg/ℓ RC : 10 ~ 150mg/ℓ	9	50/1 bag 50/1 bag	DPD-F-1 HOCl-K-1
6	Mn	Manganese	Mn-1Z	Mn : 0.5 ~ 20.0mg/ℓ	9	50/50ml 50/50ml	Mn-RA, Mn-RB
7	Fe-T	Total Iron	Fe-1Z	Fe : 0.1 ~ 5.0mg/ℓ	9	50/1 bag	Fe-RA,
8	PO ₄	H. Phosphate	PO ₄ -1Z-H	PO ₄ : 10 ~ 240mg/ℓ	9	50/500ml 50/1 bag	H-PO ₄ -T-RA PO ₄ -T-RB
9	PO ₄	Phosphate	PO ₄ -1Z-T	PO ₄ : 0.2 ~ 50mg/ℓ	9	36/18ml 50/1 bag	PO ₄ -T-RA PO ₄ -T-RB
10	NO ₂ -N	Nitrite nitrogen	NO ₂ -N-1Z	NO ₂ : 0.006 ~ 0.3mg/ℓ	9	50/1 bag 50/1 bag	NO ₂ -T-RA NO ₂ -T-RB
11	NO ₃ -N	Nitrate nitrogen	NO ₃ -N-1Z	NO ₃ : 0.05 ~ 4.5mg/ℓ	9	50/1 bag 50/1 bag	NO ₃ -T-RA NO ₃ -T-RB
12	NH ₄ -N	Ammonium nitrogen	NH ₄ -1Z-A	NH ₄ : 0.0 ~ 10.0mg/ℓ	9	50/1 bag 36/1 btl.	NH ₄ -Z-RA NH ₄ -Z-RB
13	O ₃	Ozone	O ₃ -1Z	O ₃ : 0.1 ~ 1.5mg/ℓ	9	50/1 bag	OZ-K-1
14	Cu-T	Copper	Cu-1Z	Cu : 0.1 ~ 10mg/ℓ	9	50/1 btl.	Cu-RA
15	Cr ⁶⁺	Chromium Hexad	Cr-1Z	Cr : 0.05 ~ 10mg/ℓ	9	50/1 btl.	Cr-RA
16	CN ⁻	Free cyanide	CN-1Z	CN : 0.01 ~ 5mg/ℓ	9	50/1 btl.	CN-RA CN-RB
17	Ni ²⁺	Nickel	Ni-1Z	Ni : 0.3 ~ 10mg/ℓ	9	50/1 btl.	Ni-RA
18	Zn ²⁺	Zinc	Zn-1Z	Zn : 0.0 ~ 5.0mg/ℓ	9	50/1 btl.	Zn-RA
19	Cl ₂	DPD Chlorine	DP-7Z	Cl ₂ : 0.05 ~ 2.0mg/ℓ	10	50/1 bag	DPD-F-1
20	Cl ₂	H. Chlorine	RC-7Z	RC : 10 ~ 200mg/ℓ	10	50/1 bag	HOCl-K-1
21	pH	BTB	BTB-7Z	pH : 5.8 ~ 7.6	10	36/18ml	BTB
22	pH	BTS	BTS-7Z	pH : 5.8 ~ 8.6	10	36/18ml	BTS
23	TH	Total Hardness	TH-7Z	TH : 5.0 ~ 300mg/ℓ	10	18/18ml	TH-WA

◆Chlorine Tester Optional Accessories

- Free Chlorine Reagent DPD-F-1 (100 tests/bag)
- Total Chlorine Reagent DPD-TL-1 (100 tests/bag)
- Test Tube for DP-1Z
- Test Tube for DP-7Z

Exp.: Analysis of Zinc

- ◆ Powder Reagent is sealed up for long/safe validity
- ◆ Convenient for on-site Testing
- ◆ Refined Colorimetry, Ion-Test

Fine transparent Test Cell & 7 colors gradation

1	Standard Color	1
2	Reagent	50 Pcs.
3	Test Cell	1Pc.
4	Box	1Pc.
5	Pipette	1Pc.

Reagent (50 pcs) (selective)	Test Cell with Lid (5ml)
WIT-□□□□ (EXP. WIT-Cu)	CELL-5C

◆ ION TEST Analysis Procedure

1 Add Reagent

Drop reagent into the cell

2 Add Sample

Drop 5 ml of sample into the cell

3 Shake

Shake slightly test cell with lid

4 Colorimetry

Compare to analyze with standard color card

◆ ION TEST KIT SPECIFICATION

Model	Testing item	Measuring Range (mg/ℓ = ppm) / Principle	Determination Time	Quantity
WIT-Cu	Copper	0.2/0.5/1.0/2.0/3.0/5.0/10 Cu^T Bicinchoninic Acid method	2min.	50
-Cu(B)	Copper	0.2/0.5/1.0/2.0/3.0/5.0/10 Cu^T Bathocuproine method ★ If Test water contains such Chelating agent as EDTA, etc., please apply WIT-Cu(B) for testing.	1min.	50
-Ni	Nickel	0.2/0.5/1.0/2.0/3.0/5.0/10 Ni^{2+} Nioxime method	2min.	50
-NH ₄	Ammonium ion Ammonium-Nitrogen	0.3/0.7/1.3/2.6/6.5/13/26 NH_4^+ 0.2/0.5/1.0/2.0/5.0/10/20 NH_4^+-N Indophenol Blue method	5min.	50
-COD-M	COD-M(Middle range)	0/5/10/13/20/50/100 Oxidation with Potassium Permanganate in Alkalinity method	4~6min.	50
-COD-H	COD-H(High range)	0/20/40/80/120/180/250 Oxidation with Potassium Permanganate in Alkalinity method	4~6min.	50
-Cr ⁶⁺	Chromium(Hexavalent)	0.05/0.1/0.2/0.5/0.8/1.0/2.0 Cr^{6+} Diphenylcarbazide method	2min.	50
-Cr ^T	Total Chromium	0.5/1/2/5/8/10/20 Cr^T Oxidation and Diphenylcarbazide method	30sec.	50
-HOCl	Residual Chlorine	10/20/30/50/80/100/150 $HOCl$ KI method	10sec.	50
-O ₃	Ozone	0.1/0.2/0.3/0.5/0.8/1.0/2.0 O_3 DPD method	10sec.	50
-CN	Free Cyanide	0.02/0.05/0.1/0.2/0.5/1.0/2.0 CN^- 4-Pyridinecarboxylic Acid method	10min.	50
-H ₂ O ₂ -H	Hydrogen Peroxide (High range)	10/20/30/50/80/100/150 H_2O_2 KI method	10sec.	50
-NO ₂	Nitrite Nitrite-Nitrogen	0.05/0.1/0.2/0.4/0.6/0.8/1.0 NO_2^- 0.015/0.03/0.06/0.12/0.18/0.24/0.30 $NO_2^- -N$ GR method	3min.	50
-NO ₃	Nitrate Nitrate-Nitrogen	0.5/1.0/2.0/4.0/6.0/10/20 NO_3^- 0.1/0.2/0.5/1.0/1.4/2.3/4.6 $NO_3^- -N$ Reduction GR method	3min.	50
-PO ₄	Phosphate Phosphate-Phosphorus	0.2/0.5/1.0/1.5/2.0/3.0/5.0 PO_4^{3-} 0.1/0.2/0.3/0.5/0.7/1.0/1.7 $PO_4^{3-} -P$ Molybdenum blue method	3min.	50
-PO ₄ -H	Phosphate Phosphate-Phosphorus (High range)	2/5/10/15/20/30/50 PO_4^{3-} 0.7/1.7/3.3/5.0/6.6/10/17 $PO_4^{3-} -P$ Molybdenum blue method	3min.	50
-TN-i	Total Nitrogen (Inorganic)	0/5/10/20/40/60/100 TN Reduction & Indophenol blue method	20min.	50
-Fe	Iron	0.2/0.5/1.0/1.5/2.0/3.0/5.0 Fe Reduction & O-phenanthroline method	5min.	50
-Zn	Zinc	0/0.2/0.3/0.5/1.0/2.0/5.0 Zn PAN method	2min.	50

Related Products

UV/COD Monitor

UV-700W

UV/LED type Organic Pollution monitor



UV:0~2/0~4Abs/cm
COD:0~200/0~400mg/ℓ

Process Controller ①

Turbidity & Colority Monitor

TCR-700W

Turb:0~50 degree
Colority:0~50 degree



Laser Turbidity Monitor

TR-502L

Laser scattered Light Method

0.000~2.000NTU



Turbidity & Colority Monitor

TCR-502

Turb:0~50 degree
Colority:0~50 degree



SS/Turbidity Monitor

TR-700Z

90°scattered Light System

0~500 NTU



Turbidity Monitor

TR-700V

Transmission Light Method

0~2000 NTU



TSS/Turbidity Monitor

TSS-700W

Turb:0~1000 NTU
TSS:0~1000mg/ℓ



TSS/Turbidity Monitor

TSS-502

90°scattered Light System

Turb:0~500 NTU
TSS:0~500mg/ℓ



Turbidity Monitor

TR-5500

Laser scattered Light Method

0.000~2.000 NTU



Turbidity Monitor

TRD-51U SYSTEM

Surface scattered Light System

0~200(mg/ℓ or FTU)



Turbidity Monitor

TR-502Z

90°scattered Light System

0~500 NTU



MLSS Monitor

MC-502

0~20000mg/ℓ



MLSS Monitor

MC-700

0~20000mg/ℓ



Nickel Monitor

Ni-502

0~200g/ℓ (Ni)



Nickel Monitor

Ni-800

0~200g/ℓ (Ni)



Related Products

Process Controller ②

Copper Monitor CU-502



0~80g/ℓ (Cu)

Copper Monitor CU-800



0~80g/ℓ (Cu)

Conductivity Monitor EC-700



0~20mS/cm or 0~200mS/cm

Conductivity Monitor EC-502



0~20mS/cm or 0~200mS/cm

Electro-Magnetic Density Monitor EMC-700



0~25wt/vol% or 0~500mS/cm

Electro-Magnetic Density Monitor EMC-502



0~25wt/vol% or 0~500mS/cm

pH/ORP Monitor PC-700/OC-700



0.00~14.00(pH)
0~±1900mV(ORP)

pH/ORP Monitor PC-502/OC-502



0.00~14.00(pH)
0~±1900mV(ORP)

DO Monitor(Galvanic) DC-700



0~20mg/ℓ

Chlorophyll Monitor CHL-502



0.0~200μg/ℓ

Chloride Ion Monitor CL-502



0~1000mg/ℓ

DO Monitor(Galvanic) DC-502G



0~20.0mg/ℓ

Fluoride Ion Monitor KF-502



0~1000mg/ℓ

Residual Chlorine Monitor RC-100

Polarography Electrode Method



0.00~2.00mg/ℓ

Jet Air Cleaning Unit KWJ-3



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※Specifications listed in the catalog are subject to change without notice for performance improvement.

KRK

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