

ELECTROCHEMICAL INSTRUMENTS



-  pH ●
mv ●
-  ORP ●
-  Temperature ●
-  Conductivity ●
TDS ●
-  Dissolved Oxygen ●
-  Ion Concentration ●
-  Multiple Parameter ●



CONTECH[®]
Instruments Ltd.
AN ISO 9001-2008 COMPANY

Where innovation never stops...



CONTECH[®]

Where innovation never stops...



India's Largest Electro Magnetic Force Compensation (EMFC) Balance Assembly Line since 1992



Total Inhouse Manufacturing & Testing Facility to Achieve the Highest Quality Standards.

CONTECH[®] Instruments Ltd., an ISO 9001 : 2008 Company established in the year 1992 has an installation base of more than 3 lac customers all over the world. **CONTECH[®]** is the only Indian manufacturer who has developed and manufactured in true sense the complete range of electronic balances from 0.01mg accuracy Analytical Balances to 100 ton Electronic Weighbridges in its own setup illustrating the technical competence of the Company.

CONTECH[®] has established a state of the art factory in the outskirts of Mumbai with most modern equipments and machines for the manufacturing and testing of high precision laboratory instruments. 100% strict quality control, vigorous testing at every stage has made **CONTECH[®]** to be the most reputed and leading name for laboratory instruments. Company's friendly attitude with customers and constant interaction with them has led to the standardization of its products in many Industries and Institutions across the country. *Where innovation never stops.....* is the slogan of **Contech Instuments Ltd.** & is synonymous with **CONTECH[®]**, having more than 200 models of various laboratory instruments. Company's stress on continuous research and development has enabled it to offer latest products with features matched by none in the field of laboratory instrumentation.

CONTECH[®]'s vast experience and in depth knowledge of Laboratory needs and Analytical instrumentation has helped it to roll out complete range of electro chemical instruments for water quality analysis viz. **pH, mV, ORP, Conductivity, TDS, Salinity, Resistivity, Dissolved oxygen, Ion concentration** and combination of various parameters.

These electrochemical instruments are the perfect combination of reliable high technology electrochemical sensors with state of the art electronic design coupled with advanced software. These instruments cover innumerable applications in the field of **Research, Education, Chemical, Pharmaceutical, Food processing, Cosmetics, Biological, Agricultural & Water quality analysis.**



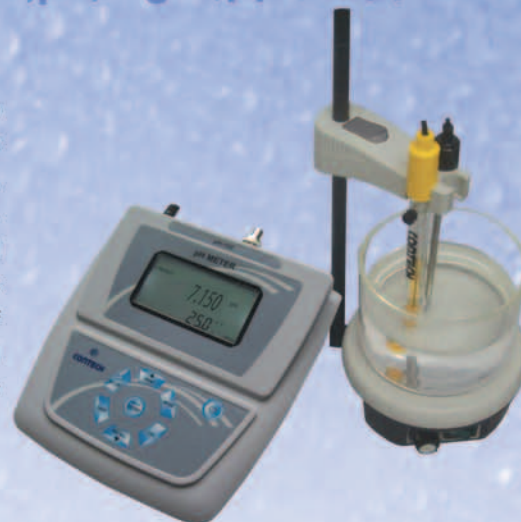
*State Of The Art Manufacturing Plant
at Navi Mumbai*

MULTIPARAMETER METER

FOR WATER QUALITY ANALYSIS-CMP-01

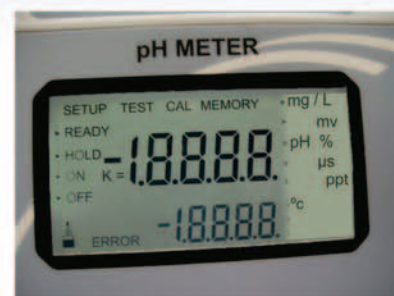
pH, mV, ms, μ S, mg/L, ppt, %, ppm, °C

CONTECH® Multiparameter Meter is the perfect combination of advanced Electrochemical sensor technology with state of the art electronics and software design. This instrument can measure several parameters, like pH, mV, Conductivity TDS, Salinity, Resistivity, Dissolved oxygen, Ion concentration and temperature using different electrodes. Large scale integration of circuit using surface mounted components and dedicated backlite LCD with display of various measuring parameter units for different parameters being measured has enabled to use this compact instrument for the measurement of multiple parameters without any ambiguity. This instrument is very useful where all parameters need to be measured like in the field of environmental protection, water quality checking, disease control, biological agriculture, aqua culture & scientific research.



Features

- pH, mV, Conductivity, Resistivity, TDS, Salinity, DO, Ion Concentration, Temperature modes.
- Automatic or Manual temperature Compensation.
- 3 point pH calibration.
- Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH
- Automatic buffer recognition.
- 1 point conductivity calibration for the entire range.
- Dissolved oxygen electrode with the salinity measurement feature to achieve automatic salinity & temperature compensation.
- Automatic air pressure compensation for DO with the help of air pressure sensor.
- Polarographic type DO electrode offers short polarization time, quick response and precise measurements.
- 2 point Ion concentration standard solution calibration.
- Switching option among 3 measurement units of Ion concentration, pX, mg/L, ppm.
- Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- Single and continuous print out of measuring parameters.
- Multiple Printout types. Combinations selectable from Sr. No., pH, mV, conductivity, TDS, Salinity, DO, Ion Concentration, Date, time and temperature.
- Real Time Clock.
- Calibration report as per GLP requirements.
- Electrode Slope and mV offset display.
- LCD display with Backlight.
- Memory storage of 100 measurements.
- Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- Temperature calibration with respect to solution of known temperature.



Customised large white backlight LCD with display of various measuring parameter units



Ports for different electrodes on the rear panel

Specifications :

	pH	mV	Conductivity	Resistivity	TDS	Salinity	DO	Ion	Temp
Range	-2.0000~19.999pH	±1999.9mV	Conductivity : 0~2000mS/cm spread into 6 ranges 0.00~20.00 μ S/cm, 20.0~200.0 μ S/cm, 200~2000 μ S/cm 2.00~20.00mS/cm, 20.0~200.0 mS/cm, 200~2000mS/cm(K=10)	0~100M Ω ·cm	0~100g/L	0~100ppt 0~200.0%	0~40.00mg/L(ppm),	0.00~14.00pX(units pX, mg/L, ppm)	-10.0 ~ 110.0°C
Accuracy	±0.002pH	±0.5mV	±0.5% FS				±0.10 mg/L	±0.5% of reading value (monovalent), ±1% of reading value (bivalent)	±0.4°C
ATC	0~100 °C	0~100 °C	0~50 °C	0~50 °C	0~50 °C	0~50 °C	0~45 °C	0~60 °C	
Electrode	EpHG03	EpHG03	ECNG01	ECNG01	ECNG01	ECNG01	EDO01	Different electrodes for different Ion measurements RG04(Reference Electrode),	ETS01

Power : 9V/ 500 mA External adaptor or battery backup unit (Optional)

Operating Temperature : 15~45°C

Meter Dimensions (mm) : 165 (L) x 190 (D) x 60 (H)

Meter Weight : 700 g

Standard Accessories : Magnetic Stirrer MS-01

LAB pH METER, ECONOMY

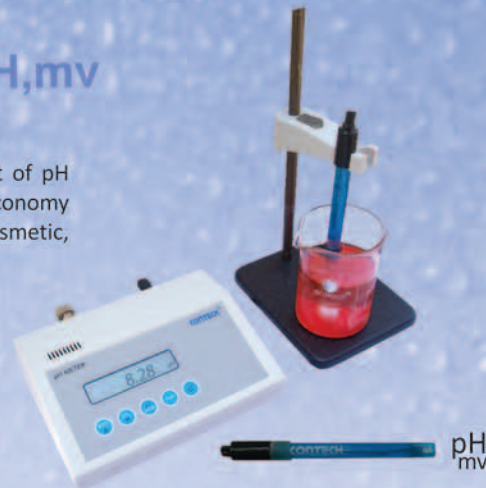
CpH-101

CONTECH® CpH-101 Bench top pH Meter is an economy model for the measurement of pH incorporating latest electronic design coupled with reliable electro chemical sensor. These economy pH Meters cover innumerable applications in Education, Chemical, Food processing, Cosmetic, Biological & Agricultural fields.

Features

- Display of pH and mV measurement.
- Manual temperature compensation, temperature setting manually.
- 3 point pH calibration, Automatic buffer recognition.
- Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH

pH,mv



LAB pH METER, PRECISION

CpH-102 & CpH-103

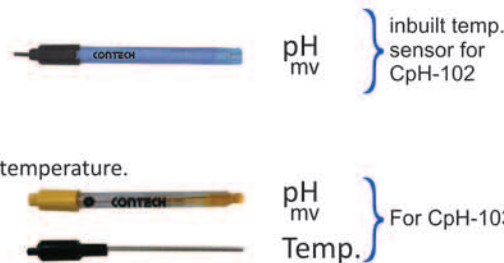
CONTECH® CpH-102, an advanced Bench top pH Meter is the perfect combination of the state of the art electronic design coupled with advanced software & reliable electro chemical sensor higher uses a combination plastic pH electrode with inbuilt temperature sensor for the simultaneous measurements of pH & temperature & automatic temperature correction. CpH-103, a higher end bench pH Meter incorporates a glass electrode & separate temperature sensor for high accuracy pH measurement & automatic temperature compensation.

These pH Meters cover innumerable applications in Research, Education, Chemical, Pharmaceutical, Food processing, Cosmetic, Biological & Agricultural fields.

Features

- pH, mV and temperature measurement.
- Automatic or Manual temperature Compensation
- 3 point pH calibration, Automatic buffer recognition.
- Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH
- Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- Single and continuous print out of measuring parameters.
- Multiple Printout types. Combinations selectable from Sr. No., pH, mV, Date, time and temperature.
- Real Time Clock. Calibration report as per GLP requirements.
- Electrode Slope and mV offset display.
- Memory storage of 100 pH measurements.
- Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- Temperature calibration with respect to solution of known temperature.

pH,mv,°C



Specifications :

Model	CpH-101	CpH-102	CpH-103
pH Range	0-14pH	0-14pH	-2.0000~19.999pH
pH Resolution	0.01pH	0.01pH	0.001pH
pH Accuracy	±0.02pH	±0.01pH	±0.002pH
Temperature compensation	Manual	Automatic or Manual	Automatic or Manual
Temperature range	0~100 ^o C	0~100 ^o C	0~100 ^o C
mV Range	±1999mV	±1999mV	±1999.9mV
mV Resolution	1mV	1mV	0.1mV
mV Accuracy	±2mV	±1mV	±0.5mV
Electrode	pH combination electrode - Plastic- EpHP01	pH combination electrode with built in temperature sensor - Plastic-EpHP02	pH combination electrode - Glass -EpHG03
Temperature Electrode	---	Built in	Temperature sensor electrode - ETS01
Meter Dimensions (mm)	175 (L) x 140 (D) x 55 (H)	165 (L) x 190 (D) x 60 (H)	165 (L) x 190 (D) x 60 (H)
Meter Weight	600 g	700 g	700 g

Display : Backlight LCD
 Power : 9V/ 500mA External adaptor or battery backup unit. (Optional)
 Operating Temperature : 15~45°C

CONDUCTIVITY METER

CC-01

CONTECH® Laboratory Conductivity Meter can measure Conductivity, Resistivity, Total Dissolved Solids(TDS), Salinity & Temperature of any solution. This instrument is suitable in the field of water quality monitoring, aqua culture, biological agriculture, scientific & educational research, food safety, petrochemical and environmental protection. It uses ECNG01 glass electrode with a platinum plate sensitive element coated with platinum black to avoid errors due to polarization especially in solutions of high conductivity.

Features

- ◆ Conductivity, resistivity, total dissolved solids(TDS), salinity & temperature measurement.
- ◆ Automatic or manual temperature compensation
- ◆ 1 point calibration for the entire range.
- ◆ Bi directional RS232 interface. Baud rate selectable from 1200, 2400, 4800 and 9600.
- ◆ Single and continuous print out of readings.
- ◆ Multiple Printout types. Combinations selectable from different measuring units.
- ◆ Real Time Clock. Calibration report as per GLP requirements.
- ◆ Memory storage of 100 measurements.
- ◆ Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- ◆ Temperature calibration with respect to solution of known temperature.

ms, μ s, mg/L, ppt, °C



Temp.
Cond.
TDS



Specifications :

Measurement Range	: Conductivity : 0~2000mS/cm spread into 6 ranges 0.00~20.00 μ S/cm, 20.0~200.0 μ S/cm, 200~2000 μ S/cm, 2.00~20.0mS/cm, 20.0~200.0 mS/cm, 200~2000mS/cm(K=10) Resistivity : 0~100M Ω cm TDS : 0~100g/L Salinity : 0~100ppt Temperature : -10.0 ~ 110.0°C
Precision	: Conductivity : \pm 0.5% FS Temperature : \pm 0.4°C
ATC	: 0~50 °C
Display	: Backlite LCD
Power	: 9V/ 500 mA External adaptor or battery backup unit (Optional)
Operating Temperature	: 15~45°C
Meter Dimensions(mm)	: 165 (L) x 190 (D) x 60 (H)
Meter Weight	: 700 g
Electrode	: Conductivity electrode - ECNG01 Temperature sensor electrode- ETS01

DISSOLVED OXYGEN METER

CDO-01

CONTECH® Dissolved Oxygen Meter incorporates membrane electrode method to measure dissolved oxygen concentration, and saturation of water solution. Polarographic type dissolved oxygen electrode offers quick response, accurate measurement, short polarization time along with features for automatic salinity and temperature compensation & air pressure correction with the help of built in air pressure sensor. DO meters are useful for aquaculture, monitoring of water resource, beverage production, sewage disposal, biological agriculture, environmental protection and scientific research.

Features

- ◆ Dissolved oxygen and temperature measurement.
- ◆ Polarographic type DO electrode offers short polarization time, quick response and precise measurements.
- ◆ Easy to use electrode calibration sets and diaphragm cap.
- ◆ Dissolved oxygen electrode with the salinity measurement feature to achieve automatic salinity & temperature compensation.
- ◆ Automatic air pressure correction with the help of air pressure sensor.
- ◆ Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- ◆ Single and continuous print out of readings.
- ◆ Multiple Printout types. Combinations selectable from different measuring parameters.
- ◆ Real Time Clock. Calibration report as per GLP requirements.
- ◆ Memory storage of 100 test results.
- ◆ Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- ◆ Supplied with Magnetic Stirrer MS-01 as standard.

mg/L, ppm, %, °C



Temp.
DO

Specifications :

Measurement Range	: DO : 0~40.00mg/L(ppm), 0~200.0% Temperature : 0 ~ 45°C
Precision	: DO : \pm 0.10 mg/L Temperature : \pm 0.4°C
Temperature correction	: Automatic 0~45°C
Salinity correction	: Automatic 0~45ppt
Air pressure correction	: Automatic 80 ~ 105kPa
Display	: Backlight LCD
Power	: 9V/ 500 mA External adaptor or battery backup unit (Optional)
Operating Temperature	: 15~45°C
Meter Dimensions (mm)	: 165 (L) x 190 (D) x 60 (H)
Meter Weight	: 700 g
Electrode	: DO electrode-EDO01
Magnetic Stirrer	: MS-01

ORP METER

COR-01

CONTECH[®] pH/ORP Meter combined with EORP-01 electrode is used for the measurement of pH and oxidation reduction potential (ORP) in liquids. These ORP meters are mainly used in common solution and waste water testing.

Features

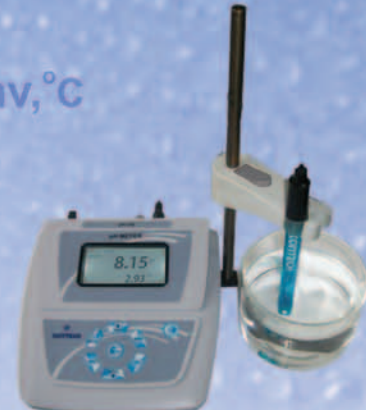
- pH, Rel.mV and temperature measurement.
- Automatic or manual temperature compensation.
- 3 point pH calibration.
- Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH
- Automatic buffer recognition.
- Bi directional RS232 interface. Baud rate selectable from 1200, 2400,4800 and 9600.
- Single and continuous print out of pH/Rel.mV.
- Multiple Printout types. Combinations selectable from Sr. No., pH, Rel.mV, Date, time and temperature.
- Real Time Clock. Calibration report as per GLP requirements.
- Electrode Slope display.
- Memory storage of 100 measurements.
- Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- Temperature calibration with respect to solution of known temperature.



ORP
Temp.

Specifications :

pH Range	: 0-14pH
pH Resolution	: 0.01pH
pH Accuracy	: ±0.01pH
Temperature compensation	: Automatic or Manual
Temperature range	: 0~100°C
ORP Range	: ±2000mV
ORP Resolution	: 1mV
ORP Accuracy	: ±1mV
Input Resistance	: >1x10 ¹² ohms
Display	: Backlight LCD, Character height
Power	: 9V/ 500 mA External adaptor or battery backup unit (Optional)
Operating Temperature	: 15~45°C
Meter Dimensions (mm)	: 165 (L) x 190 (D) x 60 (H)
Meter Weight	: 700 g
ORP Electrode	: ORP Combination Electrode EORP-01 Temperature Electrode ETS01



ION CONCENTRATION METER

CIC SERIES

CONTECH[®] Laboratory Ion Concentration Meters when used with particular Ion selective electrode and corresponding reference electrode can measure the correspondent electrode potential mV value, pX value and Ion concentration. These instruments are useful in the field of Food Safety, Petrochemical, Water quality checking, Aqua Culture, Biological Agriculture, Environmental Protection and Research and Education.

Features

- Concentration unit mv & temperature measurement.
- 2 point Ion concentration standard solution calibration.
- Automatic or Manual temperature Compensation
- Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- Single and continuous print out of readings.
- Multiple Printout types. Combinations selectable from Sr. No., concentration unit, mV and temperature.
- Real Time Clock. Calibration report as per GLP requirements.
- LCD display with Backlight.
- Memory storage of 100 measurements.
- Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- Temperature calibration with respect to solution of known temperature.

pH(pX),mg/L,ppm,mv,°C



Temp.
ION
Ref.

Model	CICNa	CICCa	CICF
Measurement parameters	Na ⁺ concentration, mV, Temp	Ca ²⁺ concentration, mV, Temp	F ⁻ concentration, mV, Temp
Measuring Units	pNa, mg/L, ppm	pCa, mg/L, ppm	pF, mg/L, ppm
Measuring Range	0.00~9.00 pNa	0.00~9.00 pCa	0.00~9.00 pF
mV Range	±1999.9mV	±1999.9mV	±1999.9mV
Temperature Range	-10~ 110°C	-10~ 110°C	-10~ 110°C
Measurement Accuracy	±0.01pNa	±0.01pCa	±0.01pF
mV Accuracy	±0.1% FS	±0.1% FS	±0.1% FS
Temperature Accuracy	±0.5°C	±0.5°C	±0.5°C
ATC Range	0~50°C	0~50°C	0~50°C
Electrodes	EINaG01(Sodium Ion Electrode), ERG02(Reference Electrode), ETS01(Temperature Electrode)	EICaP01(Calcium combination Electrode), ETS01(Temperature Electrode)	EIFC01(Fluoride Ion Electrode), ERG01 (Reference electrode) ETS01(Temperature Electrode)
Standard Accessories	MS-01(Magnetic Stirrer)	MS-01(Magnetic Stirrer)	MS-01(Magnetic Stirrer)

Power : 9V/ 500 mA External adaptor orbattery backup unit. (Optional)
Operating Temperature : 15~45°C

Meter Dimensions (mm) : 165 (L) x 190 (D) x 60 (H)
Meter Weight : 700 g

DUAL PARAMETER METERS

In some applications there may be a need to measure different parameters of a solution. The same can be fulfilled by using a single instrument with different electrodes for the respective parameter. A single instrument can measure simultaneously different combinations such as pH / Conductivity, pH/ Ion concentration, pH /Dissolved oxygen, Conductivity/Dissolved oxygen along with temperature. These instruments find usage in environmental protection, water quality checking, biological agriculture, aqua culture, scientific research and studies, etc.



pH/Conductivity Meter - CpHC

pH, mv, ms, μ s, mg/L, ppt, °C

Features

- ◆ pH , mV, Conductivity, Resistivity, TDS, Salinity, Temperature modes.
- ◆ Automatic or Manual temperature Compensation.
- ◆ 3 point pH calibration.
- ◆ Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH
- ◆ Automatic buffer recognition.
- ◆ 1 point conductivity calibration for the entire range.
- ◆ Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- ◆ Single and continuous print out of measuring parameters.
- ◆ Multiple Printout types. Combinations selectable from Sr. No., pH, mV, conductivity, TDS, Salinity, Date, time and temperature.
- ◆ Real Time Clock.
- ◆ Calibration report as per GLP requirements.
- ◆ Electrode Slope and mV offset display.
- ◆ LCD display with Backlight.
- ◆ Memory storage of 100 measurements.
- ◆ Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- ◆ Temperature calibration with respect to solution of known temperature.

Specifications :

pH Range	: -2.0000~19.999pH
mV Range	: \pm 1999.9mV
Conductivity Range	: 0~2000mS/cm spread into 6 ranges 0.00~20.00 μ S/cm, 20.0~200.0 μ S/cm, 200~2000 μ S/cm 2.00~20.00mS/cm, 20.0~200.0 mS/cm, 200~2000mS/cm(K=10)
Resistivity Range	: 0~100M Ω cm
TDS Range	: 0~100g/L
Salinity Range	: 0~100ppt
Temperature Range	: -10.0~110.0°C
pH Accuracy	: \pm 0.002pH
mV Accuracy	: \pm 0.5mV
Conductivity Accuracy	: \pm 0.5% FS
Temperature Accuracy	: \pm 0.4°C
ATC pH	: 0~100°C
ATC Conductivity	: 0~50°C
pH Electrode	: pH combination electrode-EpHG03
Temperature Electrode	: Temperature sensor electrode-ETS01
Conductivity Electrode	: ECNG01
Meter Weight	: 700 g

pH/Ion Concentration Meter - CpHI

pH, mv, mg/L, ppm, °C

Features

- ◆ pH , mV, Ion concentration, Temperature modes.
- ◆ Options of different kinds of Ions.
- ◆ Automatic or Manual temperature Compensation.
- ◆ 3 point pH calibration.
- ◆ Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH
- ◆ Automatic buffer recognition.
- ◆ 2 point Ion concentration standard solution calibration.
- ◆ Switching option among 3 measurement units of Ion concentration, pX, mg/L, ppm.
- ◆ Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- ◆ Single and continuous print out of measuring parameters.
- ◆ Multiple Printout types. Combinations selectable from Sr. No., pH, mV, Ion concentration unit, date, time and temperature.
- ◆ Real Time Clock.
- ◆ Calibration report as per GLP requirements.
- ◆ Electrode Slope and mV offset display.
- ◆ LCD display with Backlight.
- ◆ Memory storage of 100 measurements.
- ◆ Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- ◆ Temperature calibration with respect to solution of known temperature.



Specifications :

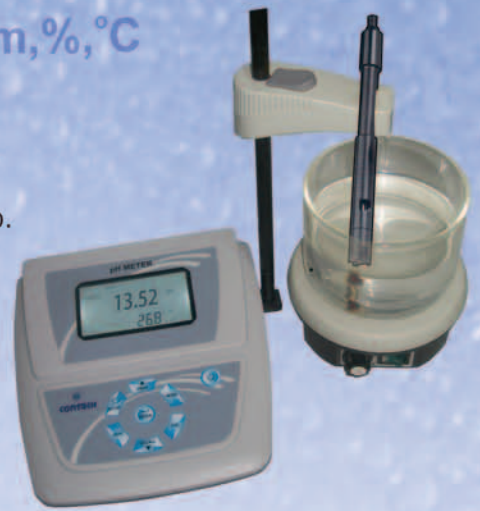
pH Range	: -2.0000~19.999pH
mV Range	: \pm 1999.9mV
Ion Conc. Range	: 0.00~14.00pX(units pX,mg/L,ppm)
Temperature Range	: -10.0 ~ 110.0°C
pH Accuracy	: \pm 0.002pH
mV Accuracy	: \pm 0.5mV
Ion Conc. Accuracy	: \pm 0.5% of reading value (monovalent), \pm 1% of reading value (bivalent)
Temperature Accuracy	: \pm 0.4°C
ATC pH	: 0~100°C
ATC Ion Concentration	: 0~60°C
pH Electrode	: pH combination electrode - EpHG03
Temperature Electrode	: Temperature sensor electrode- ETS01
ION Electrode	: Different ION concentration & different reference electrodes for different ION measurement
Standard Accessories	: Magnetic Stirrer MS-01
Meter Weight	: 700 g

pH / Dissolved Oxygen Meter - CpHDO

pH, mV, mg/L, ppm, %, °C

Features

- ◆ pH, mV, DO, Temperature modes.
- ◆ Dissolved oxygen electrode with the salinity measurement feature to achieve automatic salinity & temperature compensation.
- ◆ Automatic air pressure correction with the help of air pressure sensor.
- ◆ Polarographic type DO electrode offers short polarization time, quick response and precise measurements.
- ◆ Automatic or Manual temperature Compensation.
- ◆ 3 point pH calibration.
- ◆ Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH
- ◆ Automatic buffer recognition.
- ◆ Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- ◆ Single and continuous print out of measuring parameters.
- ◆ Multiple Printout types. Combinations selectable from Sr. No., pH, mV, DO, date, time and temperature.
- ◆ Real Time Clock.
- ◆ Calibration report as per GLP requirements.
- ◆ Electrode Slope and mV offset display.
- ◆ LCD display with Backlight.
- ◆ Memory storage of 100 measurements.
- ◆ Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- ◆ Temperature calibration with respect to solution of known temperature.



Specifications :

pH Range	: -2.0000~19.999pH
mV Range	: ±1999.9mV
DO Range	: 0~40.00mg/L(ppm), 0~200.0%
Temperature Range	: -10.0 ~ 110.0°C
pH Accuracy	: ±0.002pH
mV Accuracy	: ±0.5mV
DO Accuracy	: ±0.10 mg/L
Temperature Accuracy	: ±0.4°C
ATC pH	: 0~100°C
ATC DO	: 0~45°C
pH Electrode	: pH combination electrode-EpHG03
Temperature Electrode	: Temperature sensor electrode- ETS01
DO Electrode	: DO electrode-EDO01
Standard Accessories	: Magnetic Stirrer MS-01
Meter Weight	: 700 g

Conductivity / Dissolved Oxygen-CCDO

ms, μs, mg/L, ppt, ppm, %, °C

Features

- ◆ Conductivity, Resistivity, TDS, Salinity, DO Temperature modes.
- ◆ Automatic or Manual temperature Compensation.
- ◆ 1 point conductivity calibration for the entire range.
- ◆ Dissolved oxygen electrode with the salinity measurement feature to achieve automatic salinity & temperature compensation.
- ◆ Automatic air pressure correction with the help of air pressure sensor.
- ◆ Polarographic type DO electrode offers short polarization time, quick response and precise measurements.
- ◆ Bi directional RS232 interface. Baud rate selectable from 1200,2400,4800 and 9600.
- ◆ Single and continuous print out of measuring parameters.
- ◆ Multiple Printout types. Combinations selectable from Sr. No., Conductivity, TDS, Salinity, DO, Date, time and temperature.
- ◆ Real Time Clock.
- ◆ Calibration report as per GLP requirements.
- ◆ LCD display with Backlight.
- ◆ Memory storage of 100 measurements.
- ◆ Data logging facility up to 500 results. Data logging interval selectable from 5S, 10S, 20S, 30S, 1M, 2M and 5M.
- ◆ Temperature calibration with respect to solution of known temperature.



Specifications :

Conductivity Range	: 0~2000mS/cm spread into 6 ranges 0.00~20.00μS/cm, 20.0~200.0 μS/cm, 200~2000 μS/cm 2.00~20.00mS/cm, 20.0~200.0 mS/cm, 200~2000mS/cm(K=10)
Resistivity Range	: 0~100MΩcm
TDS Range	: 0~100g/L
Salinity Range	: 0~100ppt
DO Range	: 0~40.00mg/L(ppm), 0~200.0%
Temperature Range	: -10.0 ~ 110.0°C
Conductivity Accuracy	: ±0.5% FS
DO Accuracy	: ±0.10 mg/L
Temperature Accuracy	: ±0.4°C
ATC Conductivity	: 0~50°C
ATC DO	: 0~45°C
Conductivity Electrode	: ECNG01
DO Electrode	: EDO01
Temperature Electrode	: Temperature sensor electrode- ETS01
Standard Accessories	: Magnetic Stirrer MS-01
Meter Weight	: 700 g





ELECTRODES

Contech offers wide range of electro chemical sensors for the measurement of pH, ORP, Conductivity, DO, different Ion Concentration and Temperature. Choosing a right electrode for the specific requirement is important and the following to be considered while deciding an electrode for the measurement : accuracy of measurement, electrode body, reference construction and junction. Electrodes need to be calibrated with standards for achieving proper results. Electrodes should be stirred end maintained as per instructions to enhance the performance and life.

ELECTROCHEMICAL ELECTRODES

Electrode	Model	Specifications	Details	Application	
pH combination - Plastic	EpHP01	Plastic housing, Ceramic Junction, 0~80°C Temp. range, BNC : Connector Size : 12Ø x 160mm	Retention of accuracy for continuous measurement	General lab application. Not suitable for high alkaline chemicals (pH>12)	
pH combination with built in temperature sensor	EpHP02	Plastic housing, Ceramic Junction, 0~80°C Temp. range, BNC(pH) + Ø 3.5mm, 2 cores(temp) Connector, Size : 12 Ø x160mm	Retention of accuracy for continuous measurement, collision resistant	Simultaneous measurement of pH & temp & automatic temp. correction	
pH combination - Glass	EpHG03	Glass housing 0~90°C Temp. range, glass ground joint Junction, BNC Connector, Size : 12 Ø x160 mm	For high accuracy measurement	Suitable for low ionic strength or high viscosity solvents, ideal for colloidal or feculent solvents	
Conductivity	ECNG-01	0.5 µS / cm - 200µS /cm range, 1.0±0.2 cm-1 constant, BNC Connector, Size : 12 Ø x155mm, 5x7mm Pt plate sensitive element (coated with Pt black)	Cavity structure high precision and better repeatability	High precision conductivity measurement in lab	
Temperature Sensor	ETS-01	-10 ~ 110° C, 5 Ø x 145mm, Customized Connector	Stainless steel material, Platinum resistor Pt-100	High precision temperature measurement	
Dissolved Oxygen with built in temperature sensor	EDO-01	Polarographic, Size : 15 Ø X 180mm, polarization time : 3~5 mins mini round shell connector	Easily removable diaphragm cap. Set Consists of DO membrane, Inner solution, cathode polish paper	Measurement of dissolved oxygen with built in air pressure compensation & salinity correction	
ORP Combination Plastic	EORP-01	Plastic housing, Ceramic Junction, BNC : Connector, Sensitive element : 1mm Ø x5mm Pt pin, Size : 12 Ø x160 mm	Plastic housing, No KCl refilling requirement	Common solution and waste water	

REFERENCE ELECTRODES

Model	Specifications	Reference Solution	Application	
ERG 01	Material : Glass, Junction : Ceramic, Ref. Electrode : Ag/AgCl, Size : Ø 12x155mm	3.5mol/L KCl,	Reference for Fluoride measurement	
ERG 02	Material : Glass, Junction : Ceramic, Ref. Electrode : Ag/AgCl, Size : Ø 12x155mm	1 st salt bridge 0.1mol/L KCl 2 nd salt bridge 0.1mol/L CsCl	Reference for Sodium measurement	
ERG 03	Material : Glass, Junction : Ceramic, Ref. Electrode : Ag/AgCl, Size : Ø 12x155mm	1st salt bridge 3.5mol/L KCl 2 nd salt bridge solution (optional)	Reference for Chloride, Bromide, Iodide, Copper, Potassium, Nitrate Ion measurement	
ERG 04	Material : Glass, Junction : Ceramic, Ref. Electrode : Ag/AgCl, Size : Ø 12x155mm	1 st salt bridge 3.5mol/L KCl 2 nd salt bridge solution (optional)	Matching multiparameters	



Specifications :

ION Electrode	Description	Sensitive Film	Measuring range	Temp. range	Dimension	Reference Electrode
EINaG01	Na Electrode	Glass film	1~6pNa (10^{-1} ~ 10^{-6} mol/L)	15~45 C	Dia 12x150mm	ERG02
EINaG02	Low Na ⁺ Electrode	Glass film	1~7pNa (10^{-1} ~ 10^{-7} mol/L)	15~45°C	Dia 12x150mm	ERG02
EICaP01	Ca ²⁺ Combination Electrode	PVC film	1~5pCa (10^{-1} ~ 10^{-5} mol/L)	5~60 °C	Dia 12x15 5mm	---
EICaP02	Ca ²⁺ /Mg ²⁺ Electrode	PVC film	1~5pCa/Mg (10^{-1} ~ 10^{-5} mol/L)	5~60 °C	Dia 12x15 5mm	---
EIFC01	F ⁻ electrode	Single crystal film	1~6pF (10^{-1} ~ 10^{-6} mol/L)	5~45 °C	Dia 12x145mm	ERG01
EICIP01	Cl ⁻ electrode	Solid film	1~4.3pCl (10^{-1} ~ 5×10^{-5} mol/L)	5~60 °C	Dia 12x145mm	ERG03
EIBrP01	Br ⁻ electrode	Solid film	1~5.3pBr (10^{-1} ~ 5×10^{-6} mol/L)	5~60 °C	Dia 12x145mm	ERG03
EIIP01	I ⁻ electrode	Solid film	1~6.3pI (10^{-1} ~ 5×10^{-7} mol/L)	5~60 °C	Dia 12x145mm	ERG03
EICuP01	Cu ²⁺ electrode	Solid film	1~6.3pCu (10^{-1} ~ 5×10^{-7} mol/L)	5~60 °C	Dia 12x145mm	ERG03
EIKP01	K ⁺ electrode	PVC film	1~5pK (10^{-1} ~ 10^{-5} mol/L)	5~60 °C	Dia 12x145mm	ERG03
EINOP01	NO ₃ ⁻ electrode	PVC film	1~5pNO ₃ (10^{-1} ~ 10^{-5} mol/L)	5~60 °C	Dia 12x145mm	ERG03
EINHG01	NH ₄ ⁺ electrode	Gas Sensing glass film	1~5.3pNH ₄ (10^{-1} ~ 5×10^{-6} mol/L)	5~45 °C	Dia 16x140mm	---

ACCESSORIES

Magnetic Stirrer MS-01

Stirring speed	: 0~2300 rpm at no load.
Base Diameter	: 120mm
Maximum stirring capacity	: 1000ml
Power supply	: 6V DC Adaptor
Dimension	: 120 dia x 50mm height
Meter Weight	: 500 gms.



Electrode Holder EH-01

Dimensions (mm)	: 115(L) x 35(W) x 28(H)
Weight	: 22 g
Suitable for Electrode	: Dia 13mm~16mm



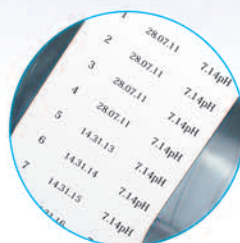
Stirr Bead SB-01

Dimensions	: 27(L) x 10(W) x 6(H)
Weight	: 5g



Printer CMP-01

Printing Method	: Thermal
Character Type	: Alpha Numeric
Character per Line	: 30 max.
Communication	: RS 232
Baud Rate	: 9600
Printing Speed	: 90mm per sec.
Paper Width	: 57mm
Paper Cutting	: Manual
Power Supply	: 8v,3A DC
Dimension (mm)	: 135(L) x 195(D) x 100(H)
Paper Width	: 57mm
Printing Speed	: 90mm per sec.
Dimensions (mm)	: 135(L) x 195(D) x 100(H)
Net Weight	: 800g approx.



Power Supply SMPS-04

Input	: 100~300 V AC, 47-63 Hz
Output	: 9VDC, 500mA
Dimensions with pin (mm)	: 50(L) x 70(H) x 70(D)
Dimensions without pin (mm)	: 50(L) x 70(H) x 37(D)
Weight	: 100g



Battery Backup BBEC-01

Input	: 100~300 V AC, 47-63 Hz
Output	: 9VDC, 500mA
Battery	: 6V, 1.2 Ah
Weight	: 600g
Demensions	: 150(L) x 65 (w) x 40(H)



Calibration Solutions

Solution	Corresponding Electrode	Description	Accuracy
CSPH 4.0	pH	pH 4.0	± 0.1 pH
CSPH 7.0		pH 7.0	± 0.1 pH
CSPH 9.2		pH 9.2	± 0.1 pH
CSCN 1413	Conductivity	1413 µs/cm	±0.5%



CONTECH[®]

Where innovation never stops...



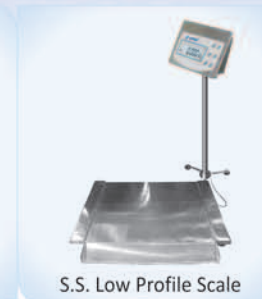
Analytical Balance



Moisture Balance



Counting Scale



S.S. Low Profile Scale



Digital
Polarimeter



Digital Abbe
Refractometer



Melting Point
Apparatus



Coal/Flue/Bio
Gas Analyzer



XRF Gold Purity
Tester



State Of The Art Manufacturing Plant

Plot No. EL-221 TTC Indl. Area, MIDC (Electronic Zone), Mhape, Navi Mumbai-400 701.

CONTECH INSTRUMENTS LTD.

301, Punit Indl. Premises, Turbhe Naka, Navi Mumbai - 400 705.

Tel. :+91 22 2761 1176 / 77 / 78 / 79 / 80, 2761 8431, 3245 9901 / 02 / 06 / 18 Fax :+91 22 2761 8421

E-mail : info@contechindia.in / sales@contechindia.in

Website: www.contechindia.com

New Delhi, Kolkata, Bangalore, Chennai, Ahmedabad, Pune, Vapi, Udupi.