

PC - 3720

Dual Channel pH Conductivity Controller



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

►► Features & Benefits

Potence Controls PC 3720 series Single/Dual Channel Analyzers pH/ORP/Conductivity/TDS measurements incorporate state of the art technology to provide flexible and reliable solutions to the customer for their Process Monitoring and Control needs. Any two of the measurements from pH / Redox (ORP) / Conductivity / Total Dissolved Solids (TDS) can be freely selected for use with the PC 3720 Analyzer via software, thus reducing the need of individual dedicated controllers, the PC 3720 can be picked up off the shelf and can be used for any 2 of the above measurements.

The large backlit display has been designed to operate in all types of environments and provides information on Main measured value and Temperature simultaneously. PC 3720 not only measures but provides Retransmission via 2 Nos. of 4–20 mA outputs and RS - 485 digital communication.

The Analyzer is suitable for all types of mounting such as wall; Pipe and Panel. The simple keypad and logical menu structure make the PC 3720 easy to use. All stored parameters and calibration data are retained in the Nonvolatile memory in case of Power failure. All these and several more features make this Analyzer very useful product for both OEMS and End users alike.

- Single/Dual Channel Analyzer
- Selectable for any 2 of pH / ORP / Conductivity / TDS in any calibration.
- High Visibility Backlit Display
- Guided calibration procedures
- 2 nos. 4-20 mA Isolated Outputs
- 4 nos. Relay Outputs
- Modbus RS 485 Output
- Non- Volatile Memory

►► Controller Specifications

Measurement	: pH/ORP or Conductivity or Total Dissolved Solids (TDS) (Freely selectable via software)
Display	: Graphic LCD with Backlit Display
Display Dimension	: 60*30 mm
Power Requirements	: 100 - 270 VAC \pm 10%, 50/60 Hz
Operating Conditions	: Temperature: 0 - 65°C, RH - 0 - 95% Non-Condensing
Storage Conditions	: Temperature: 0 - 75°C
Analog Output Signal	: Two Nos. 4 - 20mA isolated current outputs, max 600 Ω
Analog Output Function	: Retransmission
Relays	: Four Nos. Electrochemical SPDT; 10 A; 115/230 VAC
Relays Operational Mode	: Control and Alarm
Digital Communication	: Modbus RS 485 Output
Memory	: Non - Volatile
Calibration Methods	: Refer Sensor Data Details
Test / Maintenance	: Provides Analog output Test Signals to confirm operation of connected devices & Test Relay Operation
Enclosure	: Thermoset Plastic ; SS
Enclosure Dimension	: H x W x D (144 x 144 x 132 mm)
Conduit Entry / Nos.	: 1/2" NPT; 6 Nos.
Enclosure Rating	: IP65
Mounting	: Wall; Panel; Pipe
Weight	: Approx. 1.60 kg

►► PC2000 Controller Specifications when used pH / ORP Sensors

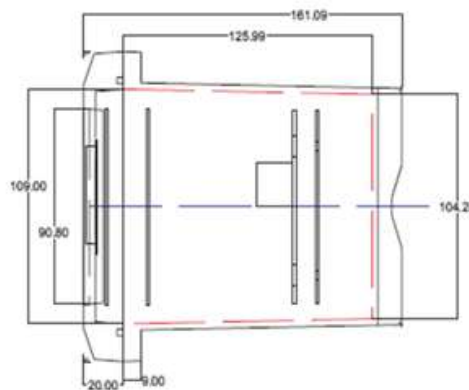
Measuring Range

pH	: 0.00 to 14.00 pH
ORP	: -2000 to 2000 mV

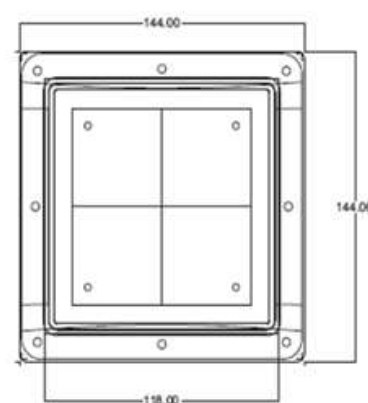
Resolution

pH	: 0.01 pH
ORP	: \pm 1 mV

►► Dimensional Drawing



SIDE VIEW



PANEL CUT-OUT

►► Combination pH/ORP Sensors



Potence Controls PC Series combination pH/ORP Sensors are designed for special applications. They can be mounted in a Flow through Tee/Chamber or Immersed in Tanks or Vessels. The reference cell is Double-Junction Porous Teflon design and comes with a built-in solution ground owing to which the performance of this sensor is enhanced. The body is made from chemically-resistant Ryton which is suitable for some of the most harsh applications. The sensors are rated for 0-105°C @100 psig and come with a standard 15 feet cable.

PC Series Sensors Different Configuration

- Dome shaped
- Flat Glass
- HF Resistant
- Flat Glass with HF resistant
- High Purity
- Detachable Cable.

The Sensors also come with a choice of temperature Elements available on request. These sensors can be connected to most of the different brands of Transmitters / Controllers

►► General Specifications

pH Sensor

Wetted Material : Ryton Body (glass Filled),
glass process electrode

Measuring Range : 0-14 pH

Temp. Limit : 0-105°C

Pressure Limit : 0-100psig @100°C
(0-6.9bar @100°C)

Max. Flow Range : 0-6.6 ft/sec (0-2 m/sec)

Accuracy : +/- 0.2 pH

Sensor Cable : Integral coaxial cable (plus
two conductors for
temperature compensator
options); std 15ft./ 4.5m
long; with stripped and
tinned wires

ORP Sensor

Wetted Material : Ryton Body (glass Filled),
Glass with Platinum process
electrode

Measuring Range : - 2000mV to +2000mV

Temp. Element : N.A

Temp. Limit : N.A

Pressure Limit : 0-100psig @100°C
(0-6.9bar @100°C)

Max. Flow Range : 0-6.6 ft/sec (0-2 m/sec)

Accuracy : Limited to calibration
solution accuracy (+/- 20mV)

Sensor Cable : Integral coaxial cable (plus
two conductors for
temperature compensator
options); std 15ft./ 4.5m long;
with stripped and tinned wires

►► Ordering Information

Model Number :

PC:

Sensor Type :

P : pH, Dome shaped

PF : pH, Flat Glass

PHF : pH, HF Resistant (Measures only in 2 to 9 pH)

PHP : pH, High Purity

R : Redox / ORP

PHA : Direct 4 to 20mA Output Sensor; Input power 9 to 24 VDC; Range: 0 to 14pH

RA : Direct 4 to 20mA Output Sensor; Input power 9 to 24 VDC; Range: - 1500mV to 1500mV

Temperature Element :

R100 : PT300

R1K : PT3000

RDT : PT300 and PT3000 (Only for Dome shaped sensor type)

NA : No Temp. Element (For ORP Sensor)

Custom :

B : Teflon Body Sensor (Only for Dome shaped sensor type)

DC : Detachable Cable (Only for Dome shaped sensor type)

Cable : (Std. 15 feet, Max 33 feet)

XX : Cable in feet

PC P R1K DC XX

Notes:

PCPHA : pH Sensor with direct 4 to 20mA Output correlates to range 0 to 14pH. Sensor comes with inbuilt temperature compensation hence Do Not fill anything in " Temperature element" section in Ordering Information PCRA : ORP Sensor with direct 4 to 20mA Output correlates to range -1500 to 1500mV. Sensor comes with inbuilt temperature compensation hence Do Not Fill anything in " Temperature Element" section in ordering information. For Std. Cable length (15 feet) DO NOT fill anything in the "Cable" section in Ordering Information else for longer cable lengths mention cable length required in feet. DO NOT Fill this section in Ordering Information if you DO NOT have any custom requirement else select Custom option as per requirement in Ordering Information.

►► Combination pH Sensor for High Temperature Application**►► Features & Benefits**

Potence Controls PCV Series pH Sensors are specifically designed for Harsh and Special Applications. These sensors with a new unique multipurpose glass; allows pH sensors to provide fast response, great accuracy and repeatability in High Temperature Application.

Sensors manufactured with Double Junction Solid Polymer Reference (SPR). Ideal for difficult industrial measurements with solid content or oxidizing agents. The solid polymer reference solves the most common failure mode for Conventional pH Sensors where the reference junction becomes clogged.

The sensor is suitable for High Temperature application without cracking or boiling of internal fill solution.

►► General Specifications

Body	: Ryton
Measuring pH Range	: 0 to 14
Accuracy	: ± 0.03 pH
Temp. Element	: Pt300 / Pt3000
Temp. Limit	: 0 to 130°C
Pressure Limit	: 100 psig
Mounting	: 3/4 th NPTM

►► Combination pH Sensor for Harsh Application



►► Features & Benefits

Potence Controls PCV Series pH Sensors are specially designed for Harsh and Special Applications. These sensors with a new unique multipurpose glass; allows pH sensors to provide fast response, great accuracy and repeatability. A concentric measuring and reference electrode with large reference area minimizes reference clogging problems.

Annular ceramic reference junction permits use where high solution currents prevail and is unaffected by streaming potentials. Double Junction Polymerized Gel filled reference requires NO pressurization allows to use in samples having Organic compounds, Proteins, Heavy metal or other compounds that reacts with silver.

The sensor is suitable for Harsh applications such as Pharma Industry/Bulk Drugs wherein the process many a times involves SOLVENTS and several Chemical Industries etc.

►► General Specifications

Body	: Ryton
Measuring pH Range	: 0 to 14
Accuracy	: ± 0.03 pH
Temp. Element	: Pt300 / Pt3000
Temp. Limit	: 0 to 100°C
Pressure Limit	: 100 psig
Mounting	: 3/4 th NPTM

►► Contacting Conductivity / TDS / Resistivity Sensors



HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

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Chromatograph
3007



Optima Gas
Chromatograph
2979 Plus



Flash
Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Particle
Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



PCR/Gradient PCR/
RTPCR



TOC
Analyzer



Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

Regulatory compliances



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Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



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2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.



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