

**TOTAL SOLUTIONS
IN
INSTRUMENTATION**

pH / ORP / DO

Temperature

Conductivity

Clean Rooms

Data Acquisition

Plant Automation

Signal Conditioning

AN ISO 9001:2008 COMPANY

LABORATORY

CLEAN ROOMS

**PROCESS
CONTROL**

DEFENCE



...Leadership Through Research

ABOUT US

Global Electronics was established in 1977 with an objective to manufacture high quality, professional Instruments & Systems. Ever since the inception, we have been constantly striving to solve the customer's problems with a solution-based approach to provide **Total Customer Satisfaction**.

Our powerful R&D facility and Applications laboratory with world class Instruments and Equipments have contributed to our success. All our instruments have been developed "In House" right from the concept level, keeping in mind the Indian environment and conditions. **Our instruments are designed for Indian conditions, not adapted to them.**

Reliability through Design - Our endeavor is to design instruments which give years of reliable and trouble free service. Our Quality Control department, equipped with Standards and Instruments, guaranteed for their accuracy and performance by National Institute of Standards & Technology, USA, gives the Quality Assurance. Each and every instrument manufactured and sold by us is reliable and meets or exceeds its published specifications.

Our work for the Department of Defence, Missile development projects, like the Automatic Test Equipment and monitoring systems is by itself a testimony to our concept of "**Reliability through Design**".

The comprehensive design capability is supported with modern Production facilities capable of producing complex and high quality instruments and Systems, using internationally accepted norms and procedures by highly trained and motivated Technical Staff.

Our long list of totally satisfied customers is proof enough of our capability to engineer a solution to meet the customer's need. These include premier companies from a diversified industry segment.

- | | | |
|------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Aurobindo Pharma Ltd | <input type="checkbox"/> Astrix Labs | <input type="checkbox"/> Arch Pharma Labs Ltd |
| <input type="checkbox"/> Dr.Reddy's Laboratories Ltd | <input type="checkbox"/> Covalent Labs | <input type="checkbox"/> Biological E Ltd |
| <input type="checkbox"/> Natco Pharma Ltd | <input type="checkbox"/> India Immunologicals | <input type="checkbox"/> Orchid Pharmaceuticals |
| <input type="checkbox"/> Nuziveedu Seeds | <input type="checkbox"/> Nuziveedu Seeds | <input type="checkbox"/> Prasad Seeds |
| <input type="checkbox"/> GSFC | <input type="checkbox"/> Auronext Pharma Pvt Ltd | <input type="checkbox"/> IICT |
| <input type="checkbox"/> FCRI | <input type="checkbox"/> NCL | <input type="checkbox"/> Elring Klinger |
| <input type="checkbox"/> Aurobindo Datong, China | <input type="checkbox"/> MRF | |
| | <input type="checkbox"/> Akums Drugs & Pharmaceuticals | |
| | <input type="checkbox"/> Oman Chemicals & Pharmaceuticals,
Sultanate of Oman | |

..... and many more !

Made in India For the World

Sole Distributors in India for

VAN LONDON pHoenix Co, USA



Van London pHoenix Co., USA is one of the largest manufacturers of pH, ORP, Dissolved Oxygen & Conductivity electrodes in the world. The state of the art 30,000 sft manufacturing units produces over 50,000 electrodes in almost 3000 varieties and are sold all over the world.

The new Patented **GX-V Green Glass** delivers unparalleled performance and stability in the most demanding applications.

- pH / ORP / DO ELECTRODES FOR LAB & INDUSTRY**
- pH / ORP / DO ELECTRODES FOR BIOTECHNOLOGY**
- ION SELECTIVE ELECTRODES**
- CONDUCTIVITY CELLS**



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LAB INSTRUMENTS

Lab pH Meters



DPH 500

- Rugged Laboratory Grade pH / mV meter
- Large easy to read LED Display
- Manual Temp. Compensation
- Table top, Mains operated

- Rugged Laboratory Grade pH/mV meter
- Large easy to read LED Display
- Built in Digital Thermometer
- Automatic / Manual Temp. Compensation



DPH504



DPH507

- Microprocessor based pH / mV meter
- Large easy to read Dual LED Display
- 3 Point Calibration
- User selectable NIST / USA Buffer set
- Automatic / Manual Temp Compensation

- Microprocessor based pH / mV meter
- Large easy to read Dual LED Display
- 3 Point Calibration with Automatic Buffer recognition
- User selectable NIST / USA Buffer set
- Automatic / Manual Temp. Compensation
- RS 232C Computer Interface
- 100 point Data Logger built in



DPH507 PLUS

Lab Conductivity / TDS Meters



DCM900

- Rugged Laboratory Grade instrument
- Manual Temp. Compensation
- 20 uS to 200 mS FS in 5 ranges
- Cell constant compatibility of 1.0 / 0.1
- Table top, Mains operated
- Option of Conductivity / TDS display



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ON LINE pH INSTRUMENTS

Microprocessor Based pH Controller

Advanced pH controller



DPH 513

Model DPH 513 is specially designed for Batch pH Control in Pharmaceutical & Water Treatment applications.

The special control algorithm developed for pH control has proved itself over thirty years in critical Enzymatic reaction applications.

- Advanced Dual Mark Space Control Algorithm for precision control
- Minimum use of Dosing reagents
- Simple ON/OFF Control Elements
- 3 Point Electrode calibration for high sensitivity applications
- Solution Ground referencing to eliminate Ground Loop problems
- High performance design for use in difficult samples like partially aqueous media
- Automatic / Manual Temperature Compensation
- Digital input for Control HALT
- RS 485 MODBUS RTU Communication
- Available in Panel Mount / Wall Mount & Flameproof Enclosures

pH Indicator



DPH 509

- True Differential Input system with Solution Ground referencing to eliminate Ground Loop Problems
- High performance design for use in difficult samples - Ultrapure Water & Non Aqueous media
- Available in Panel Mount / Wall Mount & Flameproof Enclosures

pH Transmitter

DPH 512



- True Differential Input system with Solution Ground reference
- 24V DC Operation
- Ground referenced 4 - 20mA output
- High performance design for use in difficult samples - Ultrapure Water & Non Aqueous media

pH Controller



DPH 510

- True Differential input measurement system
- Solution Ground referencing eliminated Ground Loop problems
- High performance design for use in difficult samples like Pure Water
- 2 Set point ON OFF / Dead band Control
- Available in Panel Mount / Wall Mount & Flameproof Enclosures

ON LINE CONDUCTIVITY INSTRUMENTS

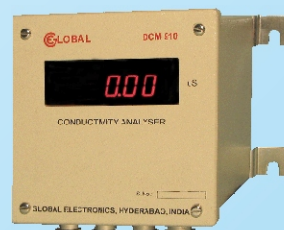
Conductivity Indicator



DCM 909

- High performance design for use in difficult samples like Pure Water
- 20µS to 2 S ranges
- TDS display option
- Ground referenced 4-20mA output for Data Acquisition
- Panel Mount / Wall Mount & Flameproof Enclosures

Conductivity Controller



DCM 910

- High performance design for use in difficult samples like Pure Water
- 20µS to 2 S ranges
- TDS display option
- 2 Set point ON OFF / Dead band Control
- Ground referenced 4-20mA output for Data Acquisition



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Electrode Holders for Online Applications

Submersion pH Electrode Holder Model : 5001 / 5002 S

- Ready to use Submersion Electrode holder for Process Reactors
- Protects Electrode from damage
- SS316 construction, Choice of VITON™ / VITON EP sealing rings
- Available in Standard lengths of 500, 1000, 1500, 2000, 2500mm with Standard 50NB ASA 150 mounting Flange
- Optional Quick removal arrangement for Fast Removal, Cleaning & Calibration
 - 5001 : Accommodates 12mm dia electrode & Temperature Sensor
 - 5002 S : Accommodates electrodes with ¾" NPTM threads with built in sensor.

Flow Through pH Electrode Holder Model : 5011

- Ready to use Flow Chamber type Electrode holder for sample lines
- Protects electrode from damage
- SS316 construction, VITON™ sealing rings
- ½" BSP Sample inlet and outlet connections
 - 5011 A : Accommodates 12mm dia electrode & Temperature Sensor
 - 5011 B : Accommodates electrodes with ¾" NPTM threads with built in sensor.

Flow Through pH Electrode Holder in Teflon Model : 5017

- Ready to use Flow Chamber Electrode
- All PTFE construction
- 1" ASA 150 PTFE Flanged connections
- Accommodates electrodes with ¾" NPTM threads.

Side Insertion pH Electrode Holder for Biotech Applications Model : 5007

- Ready to use Electrode holder for 25mm Socket with 1 ¼" threaded nut
- Accommodates 12mm x 120mm electrode with PG13.5 mounting
- SS316L construction with silicon O Rings

Submersion pH Electrode Holder for Waste Water Applications Model : 5002 PR

- Ready to use Submersion Electrode holder for Waste Water applications
- Protects electrode from damage
- PVC construction with VITON™ sealing rings
- User adjustable submersion depth
- Manual RETRACTION WITH KEEP WET chamber for electrode storage
- Built in pH Electrode Wash Jet System
- Accommodates electrodes with ¾" NPTM threads

Retractable pH Electrode Holder Model : 5008 R

- Retractable Electrode Holder for Automated Electrode Cleaning
- Pneumatic operation for Electrode Cleaning in process
- SS wetted parts with VITON™ sealing rings
- 25mm Socket Mounting
- Accommodates 12mm dia x 225mm electrode with PG13.5 mounting



5001 / 5002 S



5008 R

Conductivity Cell For Online Applications

- Concentric 2 electrode Cells
- Cell Constants of 1.0 0.1, 0.01





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TEMPERATURE INSTRUMENTS

INDICATORS



DTM 700

- ❑ PT100 input Linearised to 0.25% w.r.t. Temperature
- ❑ Flame proof Gas Gr. IIA, B, Weatherproof IP56
- ❑ High visibility LED display
- ❑ Easy 2" pipe mounting
- ❑ Ground referenced 4-20mA DC retransmission output for Data Acquisition

Microprocessor Based Indicator



DTM700C

- ❑ 21CFR Part 11 compliant
- ❑ High visibility LED display
- ❑ Wide range: -100 to +400°C with 0.1°C resolution
- ❑ PT100 input Linearised to 0.25% w.r.t. Temperature
- ❑ Flameproof Gas Gr IIA,B, IS 2148-2004
- ❑ Externally operable Keyboard
- ❑ RS 485 MODBUS RTU Communication
- ❑ Digital Data transmission for zero error data recording

CONTROLLERS



DTM 703P

- ❑ High visibility LED display
- ❑ 2 Setpoint Dead Band Control
- ❑ 3rd Set Point for HIGH Alarm
- ❑ External Limit Settings
- ❑ PT100 input Linearised to 0.25% w.r.t. Temperature
- ❑ Ground referenced 4-20mA output for DAS
- ❑ Flameproof Gas Gr IIA,B, IS 2148-2004

**EXTERNAL CALIBRATION
FOR TRUE FLAMEPROOF OPERATION
NO COMPROMISE ON SAFETY**

Microprocessor Based Controller



DTM703C

- ❑ 21CFR Part 11 compliant
- ❑ High visibility LED display
- ❑ PT100 input Linearised to 0.25% w.r.t. temperature
- ❑ Flameproof Gas Gr IIA,B, IS 2148-2004
- ❑ Dead Band Control with programmable Hysterisis
- ❑ FAIL SAFE V.High Safety Alarm
- ❑ Externally operable Keyboard
- ❑ RS 485 MODBUS RTU for zero error data Communication

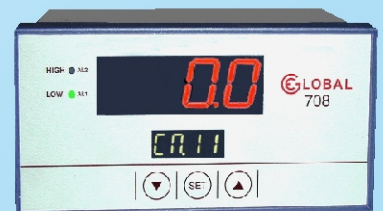
SCANNERS



DTM705

- ❑ PT100 input Linearised to 0.25% w.r.t. Temperature
- ❑ 4,6,8 or 10 Channels
- ❑ AutoScan / Hold / Manual modes
- ❑ Individual channel Zero calibration
- ❑ Panel / Wall mount / Flameproof

- ❑ 16 Channels with local display
- ❑ Scan / Hold/ Advance
- ❑ RS485 Communication (Optional)
- ❑ RTD / TC / 4 -20mA input



DTM708



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CLEAN ROOM INSTRUMENTS

Clean Room Monitor

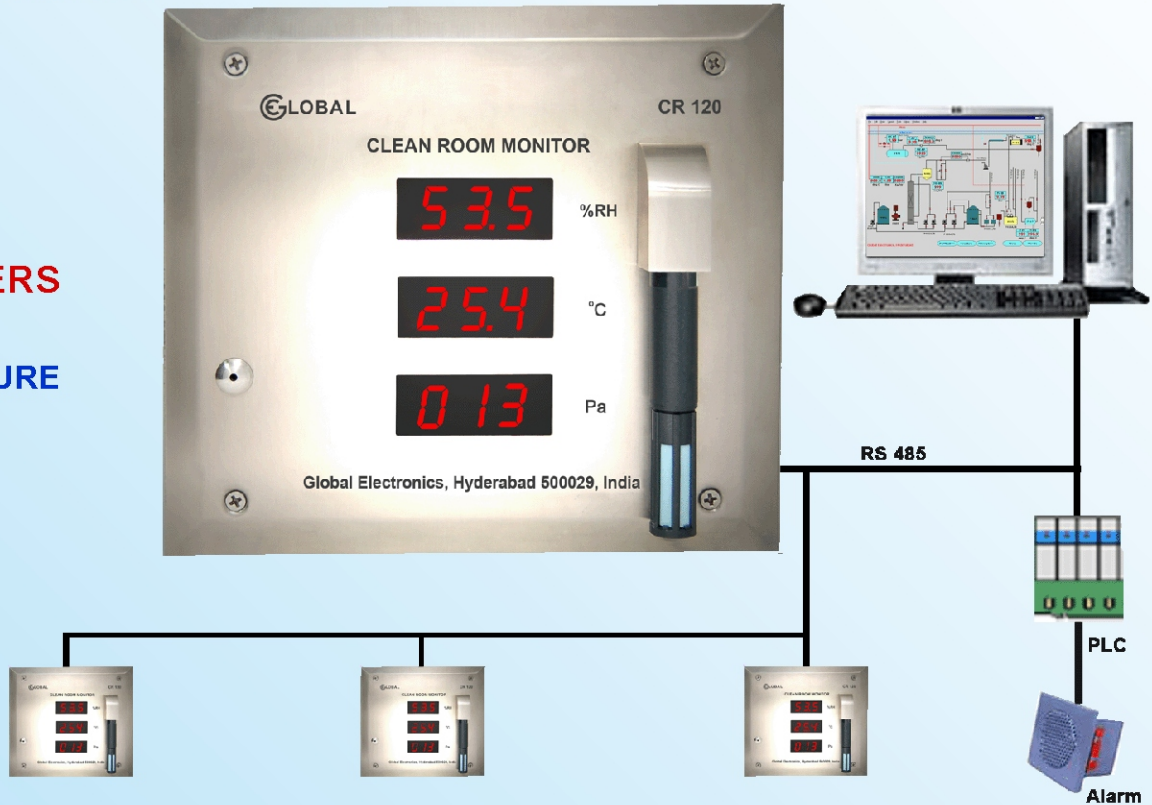
STAINLESS STEEL ENCLOSURE
ONLY 30MM DEEP

CR 120

EASILY FITS IN 40MM PANELS

PARAMETERS

TEMPERATURE
HUMIDITY
PRESSURE



- Displays Relative Humidity, Differential Pressure & Temperature with high accuracy
- 21CFR Part 11 compliant
- Hi & Lo Alarm Annunciation for each channel
- Input Compatible with most RH Sensors, Pt100 & 0-10 / 4-20mA Transmitters
- Integral Pressure Sensor option
- Software calibration with record
- 24 V DC operation
- SCADA interface through RS 485 MODBUS Communication

RH & Temperature Indicator DHT 200



- 0-100% RH with $\pm 1.5\%$ accuracy
- Dual display for RH & Temperature
- 40 to +60°C with 0.3°C accuracy
- Dual 4 - 20mA DC output for DAS

Differential Pressure Indicator DPI 110



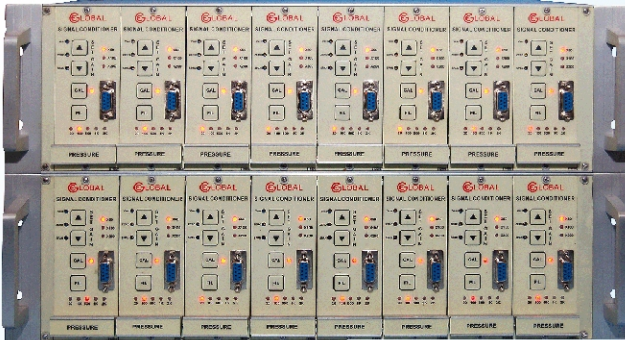
- 25mm WC Range
- 0.5% Accuracy
- 4-20mA outputs for DAS



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SIGNAL CONDITIONERS

Signal Conditioner for Pressure, Temperature & Flow



Global Electronics offers high performance, high reliability, cost effective Signal Conditioners with multiple outputs for wide variety of Analog and Digital sensors used in the measurement of the following:

- Temperature
 - Thermocouples
 - RTD's
 - Semiconductor Sensors
- Pressure / Strain Gauge
- Charge
- Flow / Level
- Frequency
- Voltage / Current

FEATURES

- High Input Impedance & High CMRR for high Accuracy
- Wide Bandwidth, fast response.
- Input Output Isolation to minimize Ground loop Errors
- Multiple buffered Outputs to connect them to different systems to enhance System Reliability.
- Analog & Digital outputs
- Highly Stable Excitation Source for Pressure / Strain Gauge & RTD Sensors
- Gains Selectable from the Front Panel
- Filters: Selectable LPF & BRF for better accuracy in Noisy Environment.

CUSTOM BUILT SYSTEMS

- Plant wide Clean Room Monitoring & Building Management Systems
- Fermentation Control System
- Waste Water Treatment Automation for Plating plants
- Gas Incinerator System Automation
- High Power Controlled IR Heating Control System for Simulation Studies of large objects
- Vacuum Tray Drier Automation
- Solvent Recovery Column Automation



AN ISO 9001:2008 COMPANY

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