ISO: 17025:2005 Accredited Calibration Services

WEST INSTRUMENTS
Process Controllers & Overtemps

Partlow
Process Controllers, Overtemps, Round Chart Recorders

CHINO
Strip Chart Recorders & Hand-held Infrared Thermometers

JENCO INSTRUMENTS INCORPORATED
pH, ORP Meters & Temperature Indicators

COMARK — A Fluke Company
Wireless Monitoring of Temperature & Humidity

DELAVAN
Point & Continuous Level for Liquid & Bulk Solids

ENERAC
Hand Held & Portable Combustion and Emissions Monitoring

Control Electronics, Inc.
Flow Meters & Sensors

IC CONTROLS
pH, Conductivity, Dissolved Oxygen, Chlorine, ORP, Sampling & Control

AquaMetrix
GLI Direct Replacement pH & ORP Probes

TECH
Power Transducers, Thermocouple Transducers & Signal Conditioners

Controllers

West 4100 1/4 Din, 6100 1/16th Din & 8100 1/8th Din Process Controllers, their features are: Universal Inputs (Thermocouple, RTD, DC Linear, Universal Outputs (Relay/SSR or DC Linear), Universal Power Supply 90-264 VAC 50/60Hz, High Accuracy +/- .25% of Span +/- 1 LSD, Front Panel Sealed to IP65/NEMA 4 (6100 to IP66), Fast Sample Rate of 4 times per second, West Pre-tune and Adaptive Self-tune, RS-485 Serial Communications option (plug in card), Dual Setpoint option (plug in card), 24V AC/DC power supply option.

West 4200 & 8200 Response Assisted PID Temperature Controllers, they have been designed to dramatically reduce overshoot and improve setting times on start-up, setpoint changes and disturbances in almost any application. The RaPID controllers incorporate PID and fuzzy logic control which works automatically in the background. All the operator has to do to improve control is set up the controller in the normal way using West's simple pre-tune/self-tune and then activate the fuzzy logic by pressing the buttons on the front.

West 4700 1/4 Din & 6700 1/16th Din Overtemp Controllers, their features are: Universal Inputs (Thermocouple, RTD, DC Linear), Universal Power Supply 90 - 264 VAC 50/60 Hz., High Accuracy +/- 1 LSD, UL, Recognition & Canadian UL (File # E160863), Front Panel Sealed to IP65/NEMA 4, Fast Sample Rate of 4 times per second, Unit is Programmable to be a Hi or Lo Limit Control.

West 4400 1/4 Din Program Controller, it's Features are: Universal Inputs, Outputs and Power Supply, 128 segments available - free format (ramp, dwell, end or join), Programs 8 X 16 segments, Programs can be joined to create longer profiles, Remote and local program number select, run, hold and abort, Selftune on dwells, Automatic hold for dwells and ramps, Profile start from Process variable or Set Point, Independent cycling for each recipe, Run, Hold, Abort, Jump and X60 commands supported, Readable run time status messages, Power failure strategy, End of program output (relay), Computer configurable connection socket, Configurable alarm strategy, & Plug in output cards.

Recorders

Partlow MRC 7000 Recorder, the input capabilities include: Thermocouple, RTD, Millivolt, volt and Milli-amp. Standard features include: Isolated process input, process value display for each pen, up to two programmable alarms per pen, automatic linearization for thermocouples and RTD's, sensor break and error fault detection, display/chart and process filtering, 0.56 inch high LED displays, tactile feedback keys on front cover, programmable display, decimal point positioning, proportional control output limits, programmable display, decimal point positioning, proportional control output limits, programmable output action on sensor bread/error condition, auto/manual transfer, security access systems and more.

Partlow MRC 7700 Recorder it's input capabilities include: Thermocouple, RTD, Millivolt, volt and Milli-amp. Description: The MRC 7700 is a microprocessor based circular chart Recording Profile Controller capable of measuring, displaying recording, controlling, and profiling Relative Humidity and/or Temperature using Dry Bulb and Wet Bulb temperatures from a variety of inputs. It uses an algorithm to automatically calculate relative humidity. Two sensor input terminals are provided on every instrument.

Here is the New MRC 5000 Recorder, it is designed with the latest innovation in recording technology, enclosures, and functionality, it is Slim, Trim, and Simple.

MRC 8000 1 and 2 Pen 12" Circle Chart Recorder is Rugged, Reliazble and Refined. Housed inside the MRC 8000's rugged structural foam case is the same reliable hardware core that has made the Partlow MRC 7000 such a proven performer.

Controllers

The new Partlow MIC 1401 Series line of 1/4 DIN Limit controllers offers a variety of enhancements for improved indication and monitoring of a number of process variables. Its innovative design combines the ease of use common to the MIC 1161 1/16 DIN and MIC 1801 1/8 DIN Partlow limit controllers as well as sharing the same basic operator interface as the popular MIC 2000 Series.

The new Partlow MIC 1400 Series line of 1/4 DIN controllers offers a variety of enhancements for improved indication and control of a number of process variables. Its innovative design combines the ease of use common to the MIC 1160 1/16 DIN and MIC 1800 1/8 DIN Partlow controllers as well as sharing the same basic operator interface as the popular MIC 2000 Series.

The Partlow MIC 1460 is a 1/4 DIN microprocessor based, single loop process controller with programmable setpoint programs. It can function either as a basic process controller, utilizing manual setpoint changes, or it can execute any one of eight setpoint programs. Each program is adjustable in the range of 1 to 16 segments and are cascadable to a maximum length of 121 segments. Each segment may be a ramp, a dwell, a join, or an end. A delayed start feature is standard as is an end of program relay. By using the auto-hold feature, assured dwells are possible. The unit can include two 4-20 mA current outputs which can be used for control and a third current output to be used for retransmission. In lieu of current control outputs, relays or SSR drivers are available. Four (4) event outputs (relay) are available as an option.

The easy programming and operational simplicity of the entire MIC Series of Partlow controllers is featured in the MIC 1160. It's adaptive-tune feature provides for better overall "quality control" with accurate "hands-free" tuning and faster, easier setup time. The MIC 1160 offers a choice of full PID, Heat -Cool, or Dual Alarm features to handle virtually any application.

Partlow's new MIC 1820 and MIC 1420 Series of micro based, 1/8 DIN and 1/4 DIN process controllers, utilize a new fuzzy logic control algorithm which dramatically improves the quality of control in PID controllers. Dubbed RaPID (Response assisted PID), the algorithm enhances the traditional PID function by continuously reblending the P, I and D control components on-line. Instead of learning from an event and reacting after it has happened (how all self-tuning PID controllers work), RaPID controllers can react as an event occurs, thereby improving the quality of control and speed of response in any application. All the operator has to do to improve control is set up the controller in the normal way using pre-tune/auto-tune, and then activate the fuzzy logic by pressing two keys on the front. There is no complicated tuning of fuzzy parameters or scaling of variables.

http://www.servonics.com

CHINO

AL 3000 & AH 3000 Series Multi-Point Type Hybrid Recorders

Simultaneous Display of 12-Point Data (AH 3000 Series)

Simultaneous digital displays of multipoint data, Universal Inputs, Package software "KIDS" for data acquisition, Alarm Display/Printings, CE-Marking, UL and CSA Standards.

Easy Operation as Conventional Analog Recorders with Various Functions

The hybrid recorders with easy-to-operate features as analog recorders comprise dotting type (6-point for BL series, 6, 12 and 24-point for BH series) and pen type (1 to 4-pen for BL series, 1 to 3-pen for BH series). Scale plates conforming to input types and measuring ranges as well as digital displays are provided with the recorders to be able to read measured values directly at a glance. The compact and lightweight recorders with depth of only 195 mm (6-point dotting and 1-pen types) offer analog/digital recording function, individual ranges for each point, and other conventional functions as hybrid recorders.

Features:

Ready to Run, Compact size, Analog scale conforming to measuring input and digital display, CD-Marking (option), Detachable terminal board for easy wiring, Input signal shift function, Easy instrumentation with communication interface, Abundant functions installed.

http://www.servonics.com

pH and ORP Controllers and Transmitters

All Solid State Design, High Accuracy, LCD Display, Extra Long Battery Life, Battery Low Indicator, Low Cost, ZERO Adjust for ORP Measurement, Manual Temperature Compensation for pH Measurement, Rugged Carrying Case (60K & 62K Kit), One Conventional 9V Battery.

60 pH Price $110.00 US

60K (Kit) pH Price $185.00 US

62 ORP Price $110.00 US

62K ORP Price $219.00 US

Features: All solid state design, 0.31" high LCD display readable under bright ambient conditions, Low drift and high stability, Fast input response, Battery low indicator, Low power consumption, Display hold function, Slope adjustment, Manual temperature compensation, One conventional 9 Volt battery, Easy to use, Low cost.

612 Price $99.00 US

612K (Kit) Price $169.00 US

Specifications: Range 0-20.00 mS/CM, Resolution 10 µS/CM, Accuracy +/- 1% +/- 1 Digit, Automatic Temperature Compensation 5-50 °C, Cell Constant 1.0, Cell Constant Adjust YES, Display 12.7 mm (0.5") high LCD, Power Source Internal 9 Volt battery, Battery Life 50 hours typical, Dimensions (meter only) 137 mm X 92 mm X 48 mm (5 3/8" X 3 5/8" X 1 7/8"), Weight (meter and battery) 0.3 Kg (10.5 oz),

103 Price $85.00 US
103 KB (Kit) $179.00 US

Features: All solid state design, Low power consumption design, reduced internal heating thus increased reliability, Multi-range indications with internal DIP switch, Monitors various amplified voltage and current transducer outputs, Fully scaleable display for different full scale values, Easy to Install, dual excitation voltage for use with different make of voltage and current output transducers, Switchable dummy zero for instrument to display pressure in metric and imperial units, Greater than 100 dB 50/60 Hz rejection, Analog output, 1/8 DIN standard cases, Heat cycled 100 hours before shipment.

Price $210.00 US

http://www.servonics.com

pH and ORP Controllers and Transmitters

Features: Dual excitation voltage, Greater than 100 dB 50/60 Hz noise rejection, Programmable dummy zero, Analog output, All solid state design for increased reliability, Programmable relay output format (3201 only), 1/8 DIN all aluminum case, Fully scaleable ZERO and SPAN for different engineering units, Programmable decimal point, Programmable polarity, Large bright LED display, Heat cycled for 100 hours before shipment, Programmable up/down scale for input open circuit (3201 only), 115 VAC, 230 VAC operations.

Price 203 $195.00 US

Price 3201 $229.00 US

Features: Scaleable ZERO and SPAN for different engineering units, Programmable decimal point, Programmable polarity, All solid state design for increased reliability, DIP switch selectable 4-20 mA/10-50 mA inputs, Greater than 100 dB 50/60 Hz noise rejection, Programmable dummy zero, Large LCD display, compact 1/8 DIN case.

Price $149.00 US

Features: All solid state design, Low power consumption. Reduced internal heating, increased reliability, High 50/60 Hz noise rejection, Heat cycled 100 hours before shipment, Easy to install, Aluminum 1/8 DIN housing, Isolated 4-20 mA output over 0-14 pH in "NOR" mode, Isolated 4-20 mA output over any two pH units in "EXP" mode, 0.56" high super efficient LED display, 115 VAC, 230 VAC operations

Price $225.00 US

Features: All solid state design, Low power consumption design, reduced internal heating thus increased reliability, High stability and fast response, Easy to install, Automatic temperature compensation , 0.5 " high LCD display, Isolated 4-20 mA current output, 1/8 DIN standard aluminum case, Heat cycled 100 hours before shipment.

Price $225.00 US

http://www.servonics.com

pH and ORP Controllers and Transmitters

Features: Input/Output Isolated, 4-20 mA Output, Manual or Automatic Temperature Compensation (693/695 pH only), NEMA 4X enclosure, Large LCD Display (695 pH/695 ORP only), High Accuracy, 4-20 mA Output Scaled to Any 1 pH or 100 mV unit Span (695 pH/695 ORP), Wide Range Power Supply, 12 to 80 DCV, BNC Input Connector, High Input Impedance, 693 pH/693 ORP Price $295.00 US, 695 pH/695 ORP.

Price $395.00 US

Features: Isolated 4-20 mA output, Dual ON/OFF relays, Automatic temperature compensation, Large LCD/LED display, Compact 1/4 DIN case, Low power solid state design, 115/230 VAC, 50/60 Hz operations.

Price $295.00 US

With LCD display to 0.01 pH, Temperature and mV indications to 0.1C/1 mV High and low set point control/alarm output relays. Proportional controller/ transmitter action:, Range -- 0 to 14.00 pH, Pulse bandwidth -- Any 2 pH units over range, Isolated 4-20 mA output , Frequency output -- conforms to ion concentration , Reversible output -- For acid and base control , Manual/ automatic temperature compensation , User programmable security lock, 1/4 DIN case, 105.3 mm behind mounting panel.

Price $ 395.00 US

Model 3101 is a Multirange conductivity controller with LED display. Internal DIP switch range select, 0 to 999 uS 0 to 9.99 mS, 0 to 99.9 mS 0 to 200 mS, High and low set point control/alarm output relays 5 to 55C automatic temperature compensation. Analog output voltage -- 1 mV/least significant digit. 1/8 DIN aluminum case.

Price $249.00 US

http://www.servonics.com

COMARK

A Fluke Company

Wireless Monitoring of Temperature & Humidity

Comark Wireless Monitoring

Comark has a range of wireless monitoring solutions offering economic and flexible systems for every temperature and humidity measurement requirement.

Advanced technology ensures high data integrity when data loss is not an option. Ideal for multiple measurement points across any size of site in:

?? The food industry - production, processing, catering and retail
?? The pharmaceutical industry - manufacture, storage and distribution
?? Laboratories - fridges, freezers, cold rooms and incubators
?? Cold storage and warehousing
?? Transport
?? Building management
?? Environmental monitoring
?? Horticulture
?? Animal husbandry

The range of communications options available offers comprehensive alarm management with the choice of sending alarm indications by email, SMS or voice.

Software enables instant access to data, taking new food and pharmaceutical standards and regulations into account to provide full audit capability for use with HACCP, due diligence and 21CFR Part 11 procedures.

http://www.servonics.com

DELAVAN

Level Controls

Offering More In Level Controls

Sonac 110

Most types of liquids; liquid/foam interface, liquids that change electrical properties; high-pressure and vacuum vessels. Integral mount magnetostrictive, single point (on/off) switch; for flow/no flow indication; high/low level alarms or starvation control.

Sonac 120

Most types of liquids that change electrical properties; high-pressure and vacuum vessels. Remote mount magnetostrictive, single point (on/off) switch; for flow/no-flow indication; high/low level alarms or starvation control.

Sonac 1100

Most types of liquids; liquid/foam interface, liquids that change electrical properties; high-pressure and vacuum vessels. True "two-wire" magnetostrictive, single point (on/off) switch; for flow/no-flow indication; high or low level alarm or control.

Sonac 220

Dry bulk materials with variable physical properties; municipal solid waste, textile fibers, puffed cereals, styrofoam pellets, sawdust, wood chips, metal chips, etc. Most all bulk solids 1/4 lb/cu. ft. and greater. Ultrasonic Switch, single point (on/off); contact or non-contact; for high and low level switch for alarm or control; plugged chute and starvation detection.

Microwave 320

Heavy, abrasive bulk materials in tanks or chutes; ignores dust build-up; 100ft. sensor separation; external detection can see through non-metallic vessels. Remote mount microwave, single point (on/off) switch; non-contact; for flow/no-flow indication; high and low level switch for alarm or control; plugged chute and starvation detection.

Sonac 410

Most liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Integral mount R.F. Capacitance Continuous Level transmitter; used in liquids and bulk solids.

Sonac 420

Most Liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Remote mount R.F. Capacitance Continuous Level transmitter; with 4-20mA and up to 2 relays.
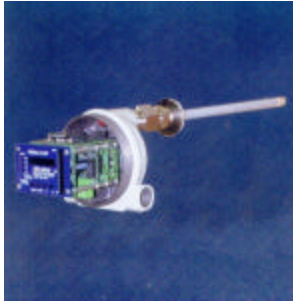
Sonac 421

Most Liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Remote mount R.F. Capacitance Continuous Level transmitter with onboard LCD; two-wire operation between electronics and probe.

DELAVAN

Cap Analog 450

Most Liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Microcontroller based R.F. Capacitance Continuous Level transmitter with integral electronics and up to 4 independently adjustable relays.

Cap Analog 460

Most Liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Interconnect cable length is 1200 ft. to remote unit. Microcontroller based R.F. Capacitance Continuous Level transmitter with remote electronics and up to 4 independently adjustable relays.
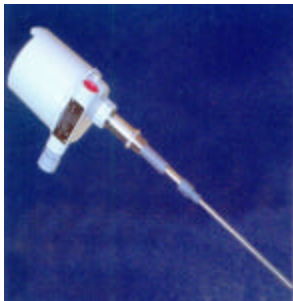
Cap Analog 4100

Most liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Integral mount true "two-wire" R.F. Capacitance Continuous Level Transmitter.

Captrol 500

Liquids; caustics; and powder bulk solids; particularly applicable for pneumatic conveying vessels. Bulk solids 10 lbs/cu. ft. and greater. Integral mount R.F. Capacitance Microcontroller based point level switch; for high and low level alarm or control.

Captrol 511-B

Liquids and bulk solid materials. Liquids, dielectric constants of 1.5 or greater. Integral mount R.F. Capacitance point level switch; for high and low level alarm or control.

Captrol 510

Liquids and free flowing materials; Hi-Lo alarms; Pump Control range from 6" of oil to 125 feet/water; well-suited for interface applications. Integral mount R.F. Capacitance dual-point level switch; single or dual point contact; for high and low level alarm or control; adjustable differential.

Captrol 514

Most liquids > 1.5 dielectric constant. Bulk solids > 10 lbs/cu. ft. with fairly stable moistures. Integral mount R.F. Capacitance Microcontroller based multipoint level switch; single, dual or multipoint contact; for high and low level alarm or control; adjustable differential.

Captrol 520

Liquids and free flowing materials; Hi-Lo alarms; Pump Control range from 6" of oil to 125 feet/water; well-suited for interface applications. Integral mount R.F. Capacitance dual-point level switch; single or dual point contact; for high and low level alarm or control; adjustable differential.

http://www.servonics.com

IC CONTROLS

Intelligent pH Analyzer

Intuitive user friendly program, "just seems to do what you expect": Auto calibration - recognizes your buffers, Self and sensor diagnostics, Fault tolerant, Output hold during calibration, Two programmable 4-20 mA outputs: 1 for acid, 1 for caustic, Dual programmable alarms with self and sensor alert, Optional PID control, Frequent adjustments by keypad prompts, Program remembers what you were doing, No long key sequences, Instant return to sample, Operate without menu or manual, LCD displays pH, temperature, alarm setpoints and calibration status.

Easy Maintenance: Reliable, separately powered and optically isolated output circuit prevents computer interface problems, Alignment controls hidden, but accessible when needed, 3 Level Security to protect settings, Calculates pH sensor Slope and Offset, Durable housing withstands hosing down, Survives acid and caustic fumes, humidity, etc.

Two pH Sensor Intelligent Analyzer

Intuitive user friendly program, "just seems to do what you expect": Auto calibration - recognizes your buffers, Self and sensor diagnostics, Fault tolerant Output hold during calibration, Two programmable 4-20 mA outputs: 1 for acid, 1 for caustic, Dual programmable alarms with self and sensor alert, Optional PID control, Frequent adjustments by keypad prompts, Program remembers what you were doing, No long key sequences, Instant return to sample, Operate without menu or manual, OCD displays pH, temperature, alarm setpoints and calibration status.

Use Your Two pH Electrodes For: Redundant back up, switching automatically from electrode A to B on failure, Intelligent control, pH A responding to input change and pH B responding to outlet pH, Two separate pH loops.

Easy Maintenance: Reliable, separately powered and optically isolated output circuit prevents computer interface problems, Alignment controls hidden, but accessible when needed, 3 Level Security to protect settings, Calculates pH sensor Slope and Offset, Durable housing withstands hosing down. Survives acid and caustic fumes, humidity, etc.

pH/ORP Two-Sensor intelligent Analyzer

Intuitive user friendly program, "just seems to do what you expect": Auto calibration - recognizes your buffers, Self and sensor diagnostics, Fault tolerant, Output hold during calibration, Two programmable 4-20 mA outputs with optional PID control, Dual programmable alarms with self and sensor alert, Frequent adjustments by keypad prompts, Program remembers what you were doing, No long key sequences and instant return to sample, Operate without menu or manual, LCD displays pH, temperature, alarm setpoints and calibration status.

Use Your pH/ORP Electrodes For: Economical Cyanide Destruction System, only (2) 657's: one for Cyanide to Cyanate and the other for Cyanate to Carbonate and Neutralize. Economical Batch Chrome Reduction System, Batch logic pH Neutral, ORP to Reduce, pH to neutralize, then final pH before discharge. Two separate loops: pH and ORP.

Easy Maintenance: Reliable, separately powered and optically isolated output circuit prevents computer interface problems, Alignment controls hidden, but accessible when needed, 3 Level Security to protect settings, Calculates pH sensor Slope and Offset, Durable housing withstands hosing down. Survives acid and caustic fumes, humidity, etc.

http://www.servonics.com

IC CONTROLS

Intelligent ORP Analyzer

Intuitive user friendly program, "just seems to do what you expect": Auto calibration - recognizes your standards, Self diagnostics, Fault tolerant, Output hold during calibration, Two programmable 4-20 mA outputs, Dual programmable alarms with self and sensor alert, Optional PID control, Frequent adjustments by keypad prompts, Program remembers what you were doing, No long key sequences, Instant return to sample, Operate without menu or manual, LCD displays + 1999 to 0 to 1999 mV, temperature, alarm setpoints and calibration status.

Easy Maintenance: Reliable, separately powered and optically isolated output circuit prevents computer interface problems, Alignment controls hidden, but accessible when needed, 3 Level Security to protect settings, Durable housing withstands hosing down. Survives acid and caustic fumes, humidity, etc.

Intelligent Conductivity Analyzer

Intuitive user friendly program, "just seems to do what you expect":

Auto calibration - recognizes your standards, Self and sensor diagnostics, Fault tolerant, Output hold during calibration, Two programmable 4-20 mA for conductivity &/or temperature, Dual programmable alarms with self and sensor alert, Optional PID control, Frequent adjustments by keypad prompts, Program remembers what you were doing, No long key sequences, Instant return to sample, Operate without menu or manual, LCD displays Conductivity, temperature, alarm setpoints and calibration status.

Easy Maintenance: Reliable, separately powered and optically isolated output circuit prevents computer interface problems, Alignment controls hidden, but accessible when needed, 3 Level Security to protect settings, Calculates sensor cell constant, Durable housing withstands hosing down. Survives acid and caustic fumes, humidity, etc.

Two Conductivity Sensor Intelligent Analyzer

Intuitive user friendly program, "just seems to do what you expect":

Auto calibration - recognizes your standards, Self and sensor diagnostics, Output hold during calibration Two programmable 4-20 mA for conductivity &/or temperature, Dual programmable alarms with self and sensor alert, Optional PID control, Frequent adjustments by keypad prompts, Program remembers what you were doing, Instant return to sample, Operate without menu or manual, LCD displays Conductivity, temperature, alarm setpoints and calibration status

Automatic Ranging: Reads directly in microsiemens (= micromhos), Full scale 1 to 200,000 microsiemens, Values 10,000 and higher displayed a millisiemens.

Two-Wire Transmitter

Benefits: Not just a transmitter; it is a full pH Analyzer too. Includes Standardize and Slope adjustment as well as 4-20 mA Zero and Span, Achieves higher accuracy over full scale even with old pH electrodes having low slope and/or large offsets, Digital readout with precision of 0.01 pH encourages good pH readings, Durable design in corrosion resistant plastic case that withstands hosing down, Survives acid and caustic fumes and humidity - full circuit on single corrosion resistant coated board, Installation savings; needs no 115 VAC at the analyzer location. Used the twisted signal pair and 24 VDC from remote supply to provide power and send signal, Designed for surface or pipe mounting, Use it with any electrodes: submersion, flow, insertion / retractable or convertible.

http://www.servonics.com

Hand Held & Portable Combustion and Emissions Monitoring

ENERAC M500

?? A micro-sized Combustion-Efficiency computer and Emissions-Monitoring System

?? Thermo-electric Cooler (condensation system for removal of water-vapor)

?? Powered by 4xAA Rechargeable batteries (4-6 hours)

?? Built-in Thermal Printer: 2" Character-type

?? Our **Enercom 2000** Windows software included
  ?? Bluetooth Wireless (optional)

ENERAC M700

?? The all-new, go-anywhere, hand-held **Enerac 700** Emissions Analyzer weighs less then 8 pounds

?? Advanced electrochemical **SEM**$^{(TM)}$ modules for CO, NO, NO_2, & SO_2

?? 3-channel (NDIR) Infrared bench for measuring CO, CO_2, & hydrocarbons

?? Thermo-electric Cooler or Permeation drier (heavy-duty option)

?? Powered by 4xD or 6xD (heavy-duty option) Rechargeable batteries (5-7 hours)

?? Built-in Thermal Printer: 2" Graphic-type

?? Our **Enercom 2000** Windows software included
  ?? Bluetooth Wireless

ENERAC 3000E

?? Our proven, portable Emissions Monitoring System

?? Advanced **SEM**$^{(TM)}$ electrochemical sensor technology meets the EPA's CTM-022 reference method, and 40CFR75 for mass emission measurements

?? Permeation drier for maximum H_2O removal from the sample stream

?? Patented temperature-stabilized NO sensor

?? Built-in Thermal Printer: 3" Character-type

?? Rechargeable battery system

TECH

Power Transducers, Thermocouple Transducers & Signal Conditioners

Hathaway T101 2W RTD Transmitter
Two Wire, Head Mounting Features:
Input from 100 ohm Pt. RTD, Linearized 4-20 mA
Output, High Precision, High Accuracy and Per-
formance Stability, Non-interactive Zero and Span
Adjustments, Immunity form R.F. Interference,
CE Conforming, Designed for Mounting on DIN
B Heads, ISO 9001 Certified, Low Cost

Hathaway T101 IS RTD Transmitter
Intrinsically Safe, Head Mounting
Features:
CENELEC EEx IIC T5, T6 Approvals (CESI Ex
91. C.161X Certificate), Input from 100 ohm Pt.
RTD, Linearized 4-20 mA Output, High Accu-
racy and Performance Stability, Non-interactive
Zero and Span Adjustments, Immunity form R.F.
Interference, CE Conforming, Designed for
Mounting on DIN B Heads, ISO 9001 Certified,
Low Cost

Hathaway T101P RTD Transmitter, Computer
Programmable, Features: Zero and Span Program-
mable Via Personal Computer, One Model for
Both All Ranges, Linearized 4-20mA Output, High
Accuracy and Performance Stability, Non-
interactive Zero and Span Adjustments, Immunity
form R.F. Interference, CE Conforming, Designed
for Mounting on DIN B Heads, ISO 9001 Certi-

Hathaway T102 TC Transmitter, Two Wire, Head
Mounting, Features: Thermocouple Input: J, K, T,
E, B, S, R and N, Linearized 4-20mA Output,
Available in °C and °F, High Accuracy and Per-
formance Stability,
Non-interactive Zero and Span Adjustments,
Immunity form R.F. Interference, CE Conforming,
Designed for Mounting on DIN B Heads, ISO
9001 Certified, Low Cost

Hathaway T102 IS TC Transmitter, Intrinsically
Safe, Head Mounting, Features:
CENELEC EEx ia IIC T5, T6 Approvals (CESI
Ex 91.C.161X Certificate), Linearized 4-20mA
Output, High Accuracy and Performance Stabil-
ity, Non-interactive Zero and Span Adjustments,
Immunity form R.F. Interference, CE Conform-
ing, Designed for Mounting on DIN B Heads,
ISO 9001 Certified, Low Cost

http://www.servonics.com

TECH

Power Transducers, Thermocouple Transducers & Signal Conditioners

Hathaway T102P TC Transmitter, Computer Programmable, Features: Zero and Span Programmable Via Personal Computer, One Model for Both Type J & K , Linearized 4 -20mA Output, High Accuracy and Performance Stability, Non-interactive Zero and Span Adjustments, Immunity form R.F. Interference, CE Conforming, Designed for Mounting on DIN B Heads, ISO 9001 Certified, Low Cost

Hathaway T106 RTD Transmitter, Two Wire, Head Mounting, Features: Input form 100 ohm Pt. RTD, 1000 VAC Isolation, Linearized 4 -20 mA Output, High Precision, High Accuracy and Performance Stability, Non -interactive Zero and Span Adjustments, Immunity form R.F. Interference, CE Conforming, Designed for Mounting in DIN B Heads, ISO 9001

Hathaway AC Current Transducers, Standard Features: True RMS or Average-Sensing Models, 0.25% of full scale accuracy, 0.01% /° C temperature coefficient, 0.2%/year long-term stability, 2.5 kV transient immunity, 5 kV impulse test, 2 kV dielectric testing, Current and Voltage Outputs, ABS DIN rail mount or metal surface mount cases

Hathaway AC Voltage Transducers, Standard Features: True RMS or Average-Sensing Models, 0.25% of full scale accuracy, 0.01% /°C temperature coefficient, 0.2%/year long-term stability, 2.5 kV transient immunity, 5 kV impulse test, 2 kV dielectric testing, Current and Voltage Outputs, ABS DIN rail mount or metal surface mount cases

Hathaway AC Power Transducers, Standard Features: True RMS or Average-Sensing Models, 0.25% of full scale accuracy, 0.01% /°C temperature coefficient, 0.2%/year long-term stability, 2.5 kV transient immunity, 5 kV impulse test, 2 kV dielectric testing, Current and Voltage Outputs, ABS DIN rail mount or metal surface mount cases
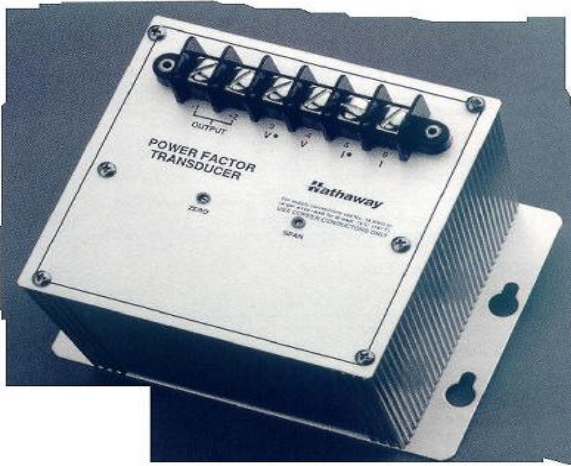

Hathaway AC Energy Transducers, Standard Features: 0.2% of reading accuracy, Voltage, current, and process outputs, Low temperature coefficient, No zero adjustment ever required, Low burdens, Exceptional long -term stability, Self-powered or externally powered, Standardized wiring and mounting, Metal surface mount cases

http://www.servonics.com

TECH

Power Transducers, Thermocouple Transducers & Signal Conditioners

Hathaway Power Factor and Phase Angle Transducers, Standard Features: 0.25% of rated output accuracy, Voltage, current, and process outputs, Low burdens, Low temperature coefficient, Transient protected, Standardized wiring and mounting, Self-powered or externally powered, ABS DIN Rail mount or metal surface mount cases
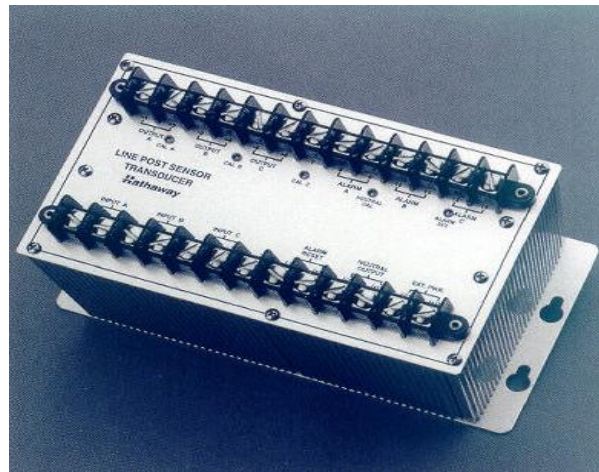
Hathaway Line Post Sensor Transducers/Fault Alarms, Specifications: Accuracy (@25°C +/-2°C): ;0.25% of full scale, Temperature Range: -20°C to +70°C, Operating Humidity: 0-95% non-condensing, Long-Term Drift: <0.1%/year, non-cumulative, Power Factor: Any, Input Impedance: Input - =20 V, 1 M Ohms typical; all others, 0.1 VA input burden max., Output Ripple: 0.5% of full scale max., Dielectric Test: 2,000 Vrms for 1 minute, Surge Withstand: ANSI C37.90a (IEEE 472), Response Time: 200 msec to 90%; 400 msec to 99%; alarm -10 msec minimum (actual trip time depends on magnitude of fault and operating level prior to fault), Calibration Adjustment: Span, +/-10% standard; zero, +/-2% standard; alarm, +/-25% standard, Operating Frequency: 60 Hz +/-10% with accuracy unless specified otherwise by suffix to part number, Power Requirements: 8 VA maximum
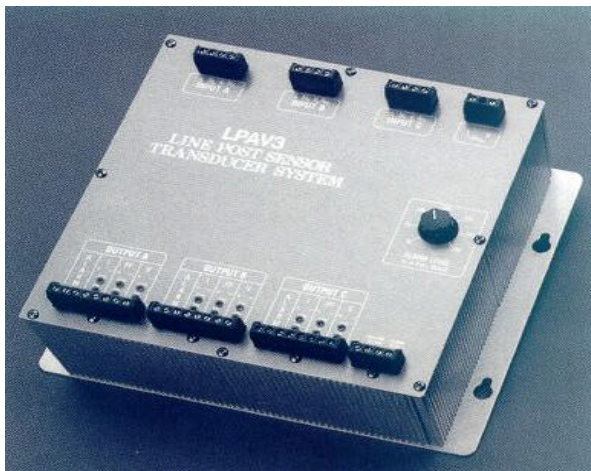
Hathaway Line Post Sensor Transducer System, Specifications: Input: Current, 0-15 VAC; voltage, 0-15 VAC; phase angle, 60° lead to 60° lag, Overload Current: 20 VAC continuous, Overload Voltage: 0 VAC continuous, Operating Frequency: 60 Hz, Operating Humidity: -95% non-condensing, Temperature Range: -30° to +60°C, Maximum Temperature Effects on Accuracy: +/0.5% of rated output, Accuracy @ 25°C (% RO at 60 Hz): 0.5% of rated output, Output: Current, 0-15 mA; voltage, 0-15 mA; power factor, 0 +/- 1.5 mA, Output @ Rated Full scale: 1 mA, Output Ripple: 0.5% peak max., Output Load: 0-10,000 Ohms, Compliance Voltage (min.): 11 VDC, Calibration Adjustment: +/- 10%, Zero Adjustment: +/- 2% Response Time (to 99%): <400 msec, Dielectric Withstand Voltage (Input to Output to Case): 1,500 VAC for 1 min., Surge Withstand Capability: ANSI C37.90A; (IEEE 472), Impulse Test, Uni-directional: 1.2 x 50 µsec 6 kV crest, Test Voltage Across Output: 100 Volts RMS, 2 sec, Output Open or Short Circuit: Protected, Open Circuit Output at Rated Input: <15 VDC, Alarm Contacts: Normally open, SPST, form "A" contacts that will close and retain closure until fault has been cleared and alarm has been reset, Phase Alarm Contacts: SPST form "A", 120 VAC, 3 amp resistive; trip levels adjustable from 50 to 200% of full scale, Neutral Alarm Contacts: SPST form "A", 120 VAC, 3 amp resistive; neutral contact trip level adjustable from 16% to 70% of full scale, Alarm Contact Reset: Momentary alarms can be selected by placing a jumper across reset terminals

http://www.servonics.com

GLI Direct Replacement pH & ORP Probes

P/R60C8 5 Wire LCP

Less Costly Than GLI, made to the same specifications, call above number for details.

Flow-thru & Submersion 3-electrode differential probe. 1.5" NPT thread at both ends. Built-in pre-amp supports up to 3,000' distance. Replaceable salt bridge for extended service life.

GLI Direct Replacement pH & ORP Probes

P/R575 pH or ORP Combination Probe

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GLI Direct Replacement pH & ORP Probes

P/R65-8 pH or ORP 2-Wire Probe

Blind Transmitter & Probe: P/R60C-8 with blind 4/20 transmitter built in.

Electrodeless Conductivity Probe

The AquaMetrix toroidal sensors are a direct replacement for existing GLI toroidal sensors and can wire into existing GLI transmitters and controllers with no configuration or set-up changes. AquaMetrix electrodeless sensors will also mount in existing GLI mounting hardware.

SHARK Controllers & Analyzers

For pH, ORP, Conductivity/Resistivity and Flow, 1/4 DIN, NEMA 4X, Polycarbonate Enclosure, User-friendly design with interior LCD menu, Easy to read with large, bright LED display , Quick and easy to calibrate, Reduces Chemical Consumption with cycle timed relays, Operates with most AquaMetrix sensors, Two control

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Control Electronics, Inc.

Flow Meters & Sensors

PDS-360 Ultrasonic Open-Channel Flowmeter

Standard Features
2 Line, 20 Character alphanumeric LCD display with LED back-lighting, Display GPM, MGD, DEPTH, TOTAL, PERCENT TEMPERATURE, DATA LOG and all programmed variables, Fully programmable from front panel, 0-10 VDC and 4-20 mA outputs, Integral Flume and Weir Equations, Two programmable sampler/totalizer pulse outputs, Temperature Compensation, Two setpoint alarms with programmable ON and OFF settings, Menu driven programming with Pass Code protection, Data Logging, 31 individual totalizers for daily flow totals, PVC Corrosion Resistant Sensor with 5 foot cable, NEMA 4X Corrosion Resistant Fiberglass enclosure with clear hinged cover.

CPS-460 Ultrasonic Doppler Flowmeter

Standard Features
2 Line, 20 Character alphanumeric LCD display with LED back-lighting, Display GPM, MGD, DEPTH, TOTAL, PERCENT TEMPERATURE, DATA LOG and all programmed variables, Fully programmable from front panel, 0-10 VDC and 4-20 mA outputs, Integral VALVE CONTROL Function, Two Programmable pulse outputs, Two programmable Alarm outputs, Adjustable damping of outputs, Selectable FLOW TYPE Algorithms, Voltage Transient/Surge Protection, PVC, Corrosion Resistant Sensor Head with 20 foot PVC Coated Flexible Steel Cable, NEMA 4X, IP65 Corrosion Resistant Fiber Glass Enclosure with Clear, Hinged Cover, System Test Modes, 31 Day Data Logged Summary, Detailed Data Logging of Pump Cycles.

ERS-560 Ultrasonic Level Monitor

Standard Features
2 line, 20 character alphanumeric LCD display with LED back-lighting, Display LEVEL INCHES, LEVEL FEET, GALLONS, PERCENT, TEMPERATURE, DATA LOG and all programmed variables, Fully programmable from front panel, 0-10 VDC and 4-20 mA outputs, Integral Tank Shape Equations, Temperature Compensation, Four Setpoints alarms with programmable ON and OFF settings, Menu driven programming with Pass Code protection, Data Logging, 31 Daily logging of AVG LEVEL, MIN/MAX and time of occurrence, PVC Corrosion Resistant Sensor with 5 foot Cable, NEMA 4X Corrosion Resistant Fiberglass enclosure with clear hinged cover.

Available Services

Servonics provides a service needed in all industries; calibration. We sell equipment that is used in all facets of industry from pharmaceutical, heat treating, manufacturing, food processing, energy, to municipalities. We service what we sell and stand behind the products by providing Service Engineers to ensure your purchase will be a pleasant experience for a long term relationship.

Calibration services are done either onsite or in our lab. We provide scheduled Preventative Maintenance programs tailored to fit your specific application & to coincide with your production schedules whenever possible. Our prices are very competitive; choose flat rate charge per visit or hourly rate. Please give us a chance to quote you a price on your service & calibration needs. We will work hard to maintain your satisfaction & to ensure a lasting business relationship.
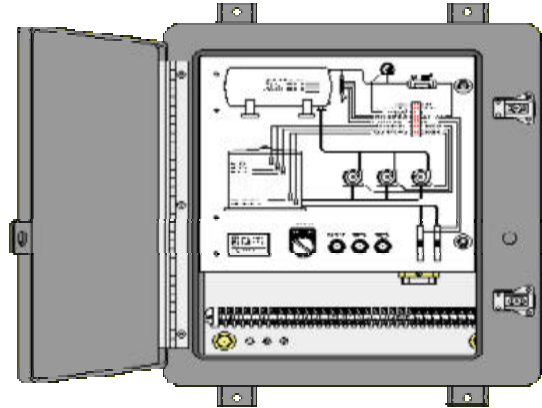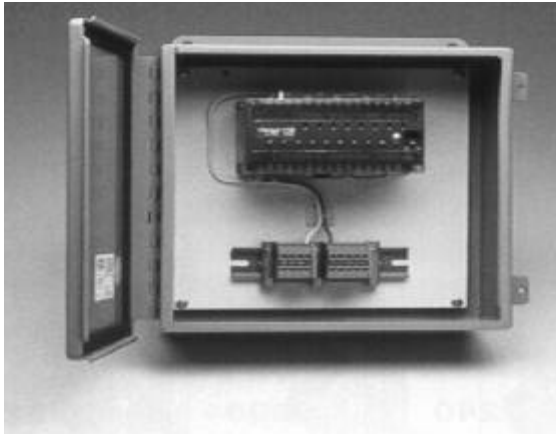

Abbreviated list of equipment we calibrate: Calibrators, multimeters, calipers, torque wrenches, pressure gauges, thermocouples, process controllers, temperature transmitters, indicators, loggers, temperature devices, HyPot, tachometers, frequency meters, amp meters, dial gauges, process transmitters, temperature controls, small scales, IR units, recorders, PLC's, pH meters, conductivity meters, flow meters, resistivity meters, & ORP meters.
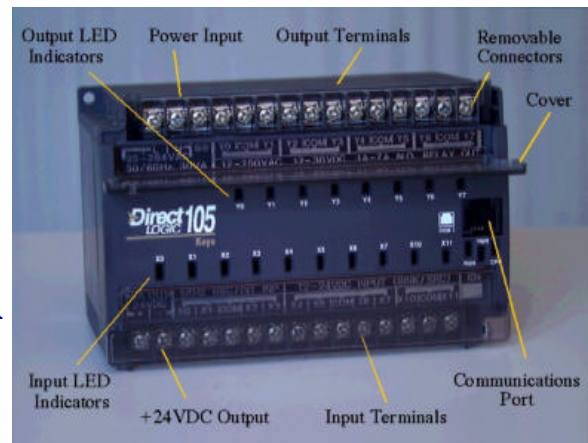
History: Servonics has been in the instrumentation & process business since 1991. Including: preventative maintenance, installations, calibrations, & repairs, Since then we have added many new types of equipment to perform your calibrations onsite and in our lab. In addition to services we provide many different lines of related equipment for sales. In 2005 we become ISO/IEC 17025:2005 Accredited from Perry Johnson Laboratory.

ISO/IEC 17025:2005 Accredited

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