

700 SERIES

Universal Process Monitor/Controller

- Totalizer and Rate Meter
- Digital Sensor Input and Relay Output
- Multiple Alarm Sources
- Real-Time Clock/Calendar
- Local and Remote Operation and Reporting
- LWAN Communication



The 700 Series is a line of innovative, technically superior, high quality, reliable microcomputer-based process monitors and controllers. They have been designed to provide precision liquid and gas flow measurement, value monitoring, data communication, and process control for a variety of commercial, industrial, and general instrumentation applications.

Information is accessed through the menu-driven integrated keypad and LCD, the RS-232C serial port, or remotely using the internal or external telecommunication interface. A clone function allows programmed information to be quickly copied from one unit into another. A reverse cloning feature recalls accumulated and programmed values for review from a second monitor. Each unit has this built-in "communicator" capability, allowing another unit to be used as an analysis tool to view data and settings.

FULL FEATURED

Multicolored front panel LED's indicate quantity totalizer state, flow rate, report state, and telecommunication status. There is on-board audio annunciation for alarms and keypad key activation.

A telecommunication option enables programming and operation for monitors distributed in a wide area network distant from a network control center. The report feature sends monitored information to a remote host computer, based on service time or clock-calendar schedules.

Input signals are accepted from a variety of digital transducers. A relay output is available with contacts suitable for security system applications. Medical-style input and output connector plugs and shielded cables are used to enhance operating reliability and eliminate ambient noise from affecting measurements.

MULTIPLE ALARM SOURCES

Set-points may be programmed to trigger local LED's and audio annunciation, produce signal outputs, and invoke local and remote alarm signaling. Programmable set-points include quantity, high/low and average flow rates, time in service, and clock-calendar time.

The reporting and alarm features provide a front end for operations management information gathering, remote billing systems, automated customer service dispatch systems, and equipment maintenance notification systems.

LOW POWER OPERATION

Non-volatile memory retains accumulated and programmed information without a backup battery, and a long life lithium battery supports the clock-calendar.

700 Series Technical Specifications

Measured Values Process Input Process Quantity Service Time Date-Time	Pulse, Hz 0-99,999,999.99 units 0-65,535 hrs day:month:year:hrs:min:sec	Process Rate Clock Date-Time Next Report	0.00±9,999,999.99 units/time day:month:year:hrs:min:sec day:month:year:hrs:min:sec
Program Values Control Functions Port Select Rate Time Base Hi/Lo Rate Limits Time Limit Measure Type	Monitor Fixed sec/min/hrs 0.00±9,999,999.99 units/time 0-65,535 hrs Quantity and Rate	Process Input Process Output Quantity 1,2 Limits Measure Units	Pulse, Hz Pulse, Relay 0.00-99,999,999.99 units 3 chars, a-z, 0-9, A-Z, and other symbols
Pulse Constant	1-999,999 (pulse/qty ratio)		
Comm Port Select Wan Numbers Date-Time Report Frequency	Sio/Wan, Report/Alarm 2 each 16 chars (0-9, *, #, A, B, C, D, T, P, ', ') day:month:year:hrs:min:sec 0-999 sec/min/hrs/days/months	Network Address Auto-Answer Report Start	0-65,535 0-255 rings day:month:year:hrs:min:sec
Configuration On/Off Calibration	Secure keypad, Error control Factory defaults		
Controls and Indicators Keypad Display Audio Lamps	Six key soft-touch - CHAN (RST2), QTY, PROG (F2), VIEW (F1), ZERO/TARE (RST1), RATE Liquid crystal nematic 2x16 alphanumeric dot matrix gray ±20° view Magnetic 2.0 KHz 85db @ 10 cm LED Qty/Rate/Time tri-color		
Input Port Interface Digital Pulse	3.5mm three conductor plug sleeve=gnd ring=signal tip=excitation 0-18.396 KHz accuracy ±0.01% ±0.5bit, 0-24V range 2.4V threshold (typ) z-in 47K hall effect open collector TTL/CMOS dry contacts		
Excitation	5.0V 50mA or external regulated supply voltage		
Output Port Interface Relay	3.5mm three conductor plug 1 Form A (B option) 28 VAC 1.0 A carry 0.5A switch 1KV iso sleeve=no/nc tip=com		
WAN Port Local Serial Port	RJ-11 FCC Subpart "H" modem full duplex V.22bis 3.5 mm audio stereo plug EIA/TIA 232D (RS-232C) full duplex 2400bps sleeve=gnd ring=txd tip=rxd		
Value Memory Diagnostics Power Required Consumption Date-Time Clock	Non-volatile error detect eeprom 100 year retention without power, capacity=64x8 (extrnl)/512x8 (intrnl), 1.0 ms/x 10^6 write Memory check sum, installation, local serial, WAN communication 2.1 mm center pos 10-16 VDC std (10-24V opt) US 110-130 VAC 50/60 Hz adapter with Europe 220VAC (option) 0.60 watts @ 12V (lamps on - no options) Battery 1216 3.0V 35 mA/hr lithium 9 years		
Environment Enclosure Size/Weight Publications Regulatory Made In USA	Operate 0-55°C, 0-95% RH non-condense, ship/store -20° to +85°C, 30 min warm to rated accuracy NEMA 4X front panel/surface mount, ABS, gray, UL94V0 (option) 6.3x4.3x1.3 (160x110x33 mm), 10.5 oz (300 gm) Operator's Manual, Warranty Registration, Key Reference Card, Web available CE Class B, RoHS, REACH, FCC 15 Class B, FCC Part 68 Pub No. 75062, 2/04 Specifications are subject to change at any time without notice.		

Application Example

