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**: Pulse, Hz
- **Process Rate**: 0.00±9,999,999.99 units/time
- **Process Quantity**: 0–99,999,999.99 units
- **Service Time**: day:month:year:hrs:min:sec
- **Date–Time**: day:month:year:hrs:min:sec
- **Next Report**: day:month:year:hrs:min:sec

Program Values
- **Control Functions**: Monitor
- **Port Select**: Fixed
- **Rate Time Base**: sec/min/hrs
- **Hi/Lo Rate Limits**: 0.00±9,999,999.99 units/time
- **Time Limit**: 0–65,535 hrs
- **Measure Type**: Quantity and Rate
- **Pulse Constant**: 1-999,999 (pulse/qty ratio)
- **Comm Port Select**: Sio/Wan, Report/Alarm
- **Wan Numbers**: 2 each 16 chars (0-9, *, #, A, B, C, D, T, P, ‘)!
- **Date–Time**: day:month:year:hrs:min:sec
- **Report Frequency**: 0–999 sec/min/hrs/days/months

Configuration
- **On/Off**: Secure keypad, Error control
- **Calibration**: Factory defaults

Controls and Indicators
- **Keypad**: Six key soft-touch - CHAN (RST2), QTY, PROG (F2), VIEW (F1), ZERO/TARE (RST1), RATE
- **Display**: Liquid crystal nematic 2x16 alphanumeric dot matrix gray ±20° view
- **Audio**: Magnetic 2.0 KHz 85db @ 10 cm
- **Lamps**: LED Qty/Rate/Time tri-color
- **Input Port Interface**: 3.5mm three conductor plug sleeve=gnd ring=signal tip=excitation
- **Digital Pulse**: 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**: 1 Form A (B option) 28 VAC 1.0 A carry 0.5A switch 1KV iso sleeve=no/nc tip=com
- **WAN Port**: RJ-11 FCC Subpart “H” modem full duplex V.22bis
- **Local Serial Port**: 3.5 mm audio stereo plug EIA/TIA 232D (RS-232C) full duplex 2400bps sleeve=gnd ring=txd tip=rxd

Value Memory
- **Non-volatile error detect errorom 100 year retention without power, capacity=64x8 (extrnl)/512x8 (intrnl), 1.0 ms/x 10^6 write

Diagnostics
- **Memory check sum, installation, local serial, WAN communication**

Power Required
- **2.1 mm center pos 10–16 VDC std (10-24V opt) US 110–130 VAC 50/60 Hz adapter with Europe 220VAC (option)
- **2.60 watts @ 12V (lamps on - no options)
- **Battery**: 1216 3.0V 35 mA/hr lithium 9 years

Environment
- **Operate 0–55°C, 0–95% RH non-condense, ship/store –20° to +85°C, 30 min warm to rated accuracy

Enclosure
- **NEMA 4X front panel/surface mount, ABS, gray, UL94V0 (option)
- **Size/Weight**: 6.3x3.1x1.3 (160x110x33 mm), 10.5 oz (300 gm)

Publications
- **Operator's Manual, Warranty Registration, Key Reference Card, Web available

Regulatory
- **FCC Part 15 Class A, Part 68 5TUUSA-23969-DT-E, UL/CSA/VDE power adapter, CE mark available

Made In USA
- **Pub No. 75062, 2/04 Specifications are subject to change at any time without notice. ©2000-2004, Florite International, Inc

Application Example

![Application Example Diagram](image-url)