



Pt Series Features—Usability	Vs Competition	Benefits/Applications
Bright, 3-Color, 9 Segment LED Display with Wide Viewing Angle	Best in class.	Applications where visual verification is important (factory automation, laboratory research). 9 Segments makes programming easier.
No Jumpers to Set, Completely Firmware Configurable	Best: new to market.	Easier to learn, easier to use, and fewer setup/configuration errors benefits all levels of users across all applications.
Automated Configuration Recognition, “Smart” Auto Simplifying Menu Flow	Best: new to market.	
Universal Inputs for Thermocouples (10 Types), RTD’s, Thermistors, Bidirectional Process Voltage/ Current, Infrared Thermocouples	Best in class.	Flexibility for users that have multiple setups such as laboratory research and QC/QA. Also enables standardization for customers with many controllers deployed across a variety of applications.
Full Scale Positive and Negative Readings (-9999 to +9999)	One of the best, many limited to (-1999 to 9999).	Needed for full scale bi-directional measurement related applications such as load/strain control. Factory automation and mechanical testing are examples.
Digital Input for Remote Latch Reset, Remote Ramp & Soak Program Start	Some have more digital channels but charge extra.	Limit controller applications where redundancy is needed for safety reasons such as process control.
UL, cUL, CE Certified, NEMA Front Panel, 5 Year Warranty	Many have certs, none offer 5 yr warranty.	Global deployment.
Pt Series Features—Performance	Vs Competition	Benefits
High Accuracy Inputs, See Table on next page	Best in class.	Better control precision for demanding applications such as semiconductor and pharmaceutical processing, clinical.
Up to 20 Input Samples per Second with 24-bit ADC	Best in class.	Improved control for responsive systems such as flow or weight control in factory automation and process industries.
Full Autotune PID with Fuzzy Logic Adaptive Control	One of the best.	Faster and better reaction to system disturbances such as those found in furnace, oven, and chamber applications.
Up to 99 Programs with 16 Ramps and Soaks Including Ramp/Soak Events and Remote Start	One of the best, a few have more cycles but less flexibility.	Combines with the measurement accuracy feature to provide precise control in menu-driven applications such as plastics, food, and ceramics processing.
Analog Output with 0.1% of FS Accuracy for Control, Retransmission, and Remote Setpoint	One of the best.	Allows for cascade control schemes popular in heat exchanger applications. Also important for data logging and analysis for general troubleshooting.
Built-in Excitation, Firmware Selectable at 5V, 10V, 12V, and 24V	Best in class.	Used with strain gauge based applications involving load and pressure and also for powering 4 to 20 mA transmitter loops in process control.
Pt Series Features—Functionality	Vs Competition	Benefits
2 or 3 Programmable Control/Alarm/Retransmission Outputs: Choice of DC Pulse, Solid State Relays, Mechanical Relays, Analog Voltage and Current; Flexible Configurability, can program multiple outputs for all modes	One of the best, some have more available output channels but with less programming flexibility.	This level of configurability and flexibility allows these units to be used for a broad range of applications. In addition, for applications where setup reconfiguration occurs often, such as laboratory research, this capability is critical.
Standard USB Host Mode Communication on All Models; Firmware Updates, Configuration and Data Transfer, and PC-based Control	One of the best, only a few have USB and these don’t support host mode.	Almost all of today’s PC’s have USB ports but few of them have serial communications. USB memory sticks can be used to replicate firmware configurations without a computer connection.
Optional Ethernet (¼ and ½ DIN models) and RS232/RS485 Serial Communications, MODBUS® Available.	Simultaneous communications make it one of the best.	Serial comms are still important for connecting with PLC’s in process control applications. Ethernet enables enterprise connectivity.
Remote Setpoint for a Variety of Remote Sensing Applications and also Cascaded Control.	One of the best, few have it and usually charge extra.	The other side of cascade control. Also useful when the control setpoint is dependent on a remote measurement.
Alarm Programmability: Above, Below, In-Band, or High-Low, All with Absolute or Deviation Referencing, All with High-High Indication, Digital Input Latch Clear.	Best in class in terms of programmability and flexibility.	Alarm functionality is important across all applications. The flexibility offered here is augmented by the communications choices available.