

APM244-5-AO-2RL Process Indicator / Controller

DESCRIPTION

- 5 Digit Red LED high-brightness Display.
- Input any DC voltage and current (Sink & Source).
- 2 relays can be programmed individually to be Hi / Lo / Hi Latch / Lo Latch / Energise with Start Delay / Hysteresis / Energised & De-energised Delay functions, or to be remote control.
- Analogue output fitted as standard with optional 1 RS485 (Modbus RTU Mode) interface with versatile functions such as control, alarm, re-transmission and communication for a wide range of industrial applications.
- 1 external control input can be programmed to be Relative PV (Tare) / PV Hold / Maximum or Minimum Hold / DI (remote monitoring) / Reset for Relay Energised Latch....
- Standard 24Vdc supply.
- Front Panel mount as standard with optional Din rail / Surface mount.



Just 24 x 48mm
with 2 x Trips & Re-Tx

TECHNICAL SPECIFICATION

Input

Input Range	Input Impedance	Input Range	Input Impedance
Voltage 0 ~ 10V	≥ 1M ohm	Current 0(4)~20 mA	250 ohm

▶ Any Input in the range of 0~10V or 0~20mA.

Calibration:	Digital calibration by front key
A/D converter:	16 bits resolution
Accuracy:	±0.04% of FS ± 1C;
Sampling rate:	15 cycles/sec
Response time:	≤100 msec.(when the AvG = "1") in standard
Input type:	0~10V / 0~5V / 1~5V / 0~10mA / 0~20mA / 4~20mA Input range High and Low programmable Ai.Hi: Settable range: 0.00~100.00% of input range Ai.Lo: Settable range: 0.00~100.00% of input range

Display & Functions

LED:	Numeric: 5 digits, 0.8(20.0mm)H red high-brightness LED Relay output indication: 4 square red LED RS 485 communication: 1 square orange LED E.C.I. function indication: 3 square green LED Max/Mini Hold indication: 2 square orange LED
Display range:	-19999~29999;
Scaling function:	Lo.SC: Low Scale; Settable range: -19999~+29999 Hi.SC: High Scale; Settable range: -19999~+29999 Programmable from 0 / 0.0 / 0.00 / 0.000
Decimal point:	
Over range indication:	ovFL, when input is over 120% of input range Hi
Under range indication:	-ovFL, when input is under -20% of input range Lo
Max / Mini recording:	Maximum and Minimum value storage during power on.
Display functions:	PV / Max(Mini) Hold / RS 485 Programmable
Front key functions:	Up and down key can be set to be a function as ECI.
Low cut:	Settable range: -19999~29999 counts
Digital fine adjust:	Pv.Zro: Settable range: -19999~+29999 Pv.SPn: Settable range: -19999~+29999

Reading Stable Function

Average:	Settable range: 1~99 times
Moving average:	Settable range: None / 1~10 times
Digital filter:	Settable range: None / 1~99 times

Control Functions(option)

Set-points:	Two set-points
Control relay:	2 Relays SPCO, 1A/230Vac, 3A/115V

Relay energised mode:	Energised levels compare with set-points: Hi / Lo / Hi.HLD / Lo.HLD programmable Energised by RS485 command of master: DO programmable
Energising functions:	Start delay / Energised & De-energised delay / Hysteresis / Energised Latch Start band (Minimum level for Energising): 0~9999counts Start delay time: 0:00.0~9(Minutes):59.9(Second) Energised delay time: 0:00.0~9(Minutes):59.9(Second) De-energised delay time: 0:00.0~9(Minutes):59.9(Second) Hysteresis: 0~5000 counts

External Control Inputs(ECI)

Input mode:	1 ECI points, Contact or open collected input, Level trigger
Functions:	Relative PV(Tare) / PV Hold / Reset for Max or Mini. Hold / DI / Reset for Relay Energised latch
Debouncing time:	Settable range 5 ~ 255 x (8m seconds)

Analogue output(option)

Accuracy:	±0.1% of F.S.; 16 bits DA converter
Ripple:	±0.1% of F.S.
Response time:	≤100 msec. (10~90% of input)
Isolation:	AC 1.5 KV between input and output
Output range:	Specify either Voltage or Current output when ordering. Voltage: 0~5V / 0~10V / 1~5V programmable Current: 0~10mA / 0~20mA / 4~20mA programmable
Output capability:	Voltage: 0~10V: ≥ 1000Ω; Current: 4(0)~20mA: ≤ 600Ω max