

ATR244

PID controller 48 x 48mm

Programmable by NFC/RFID, RS438/Modbus

single/dual analogue inputs, analogue outputs, multi-voltage power supply



Process controller **ATR244** sets new standards for Pixsys ATR range of controllers. It stands out for the bright display which ensures optimal visibility and increased level of information for the operator beside a new scrolling Help function. ATR244 relies on Pixsys flagship programming mode by NFC/RFID technology with dedicated **App MyPixsys for Android devices** (same already used for Pixsys signal converters and STR indicators) not requiring wirings and power supply, allowing quick set-up/updates on site.

Availability include a model with dual analogue input and dual analogue output for maximum flexibility of applications. It is possible to achieve **two separate heating/cooling PID control loops in one device** or to handle **mathematical operations** between two process values.

The outputs can be selected as command/multiple alarm modes/analogue retransmission. Serial communication standard is RS485 with Modbus RTU/Slave protocol.

Main features

Box	48 x 48 (front panel) x 105 mm
Power supply	24...230V AC/DC $\pm 15\%$ 50/60 Hz - galvanical isolation 2,5KV
Consumption	8 W
Display	4 digits 0,5" white + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35...95 RH%
Material	Box: PC UL94V2 self-extinguishing, front panel: PC UL94V2
Weight	Approx. 185 g
Sealing	IP65 (front panel) IP20 (box and terminal blocks)
Quick set-up options	Memory Card, software LABSOFTVIEW, or EASY-UP
APP / NFC	Programming via APP MyPixsys for Android smartphones

Inputs

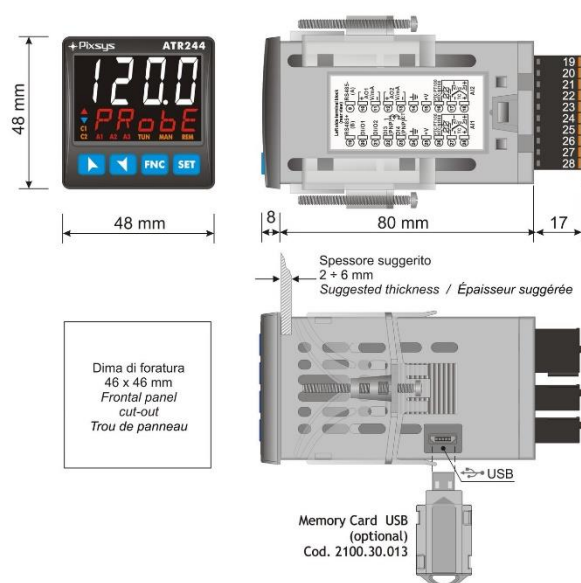
1 or 2 Analog	Res. 16 bit, selectable for TC type K, S, R, J, T, N, B (automatic compensation of cold junction) -25...85°C, $\pm 0,2\%$ F.S. ± 1 digit F.S.), thermoresistances PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K), process signals 0..10 V (50000 points), 0/4..20mA (40000 points), 0..60 mV (25000 points), potentiometer 1..150 K Ω (50000 points)
Sampling time	Programmable up to 2,1ms (frequency up to 470 Hz)
2/4 Digital	Setpoint change, Hold, Run, Tuning launch, Start / Stop, Lock configuration
1 Current Transformer (CT)	Selection C.T. 50mA, 800 μ s - 4096 points

Outputs

2/3 Relays	Relay 5 A - 250 V AC resistive change
2 SSR	12 / 24 V DC - 30 mA max
1/2 Analog	Selection 4...20 mA (40000 points $\pm 0,2\%$ F.S.) or 0...10 V DC (40000 points $\pm 0,2\%$ F.S.) for command or retransmission PV / SPV
Serial communication	RS485 Modbus RTU - Slave (4800...115200 bauds code-T)

Software feature

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportional
Tuning	Manual or automatic
Data protection	Lock of control / alarm setpoint / Access to parameters by password
Alarm modes	Absolute / Threshold, Band, High / Low deviation. Alarm with optional Manual reset. Loop Break Alarm
Auto / Manual function	Output percentage command also with automatic change in case of sensor failure
Double P.I.D.	Heating / Cooling P.I.D.
Programmer function	Pre-programmed cycle / 3 steps
Soft-Start	Rising gradient expressed as Degrees / Hour or fixed output percentage
Open / Close logic	Open / Close logic for motorized valves



Ordering codes

ATR244-12ABC

1 Analog Input + 2 Relays 5A + 2 SSR + 2 D.I. + 1 Analog Output V/mA, 24...230Vac/dc

ATR244-12ABC-T

1 Analog Input + 2 Relays 5A + 2 SSR / D.I. + 1 Analog Output V/mA + RS485, 24...230Vac/dc

ATR244-23A-T

2 Analog Inputs + 3 Relays 5A + 2 SSR + 2/4 D.I. + 2 Analog Outputs V/mA + RS485 + CT, 24Vac/dc

ATR244-23BC-T

2 Analog Inputs + 3 Relays 5A + 2 SSR + 2/4 D.I. + 2 Analog Outputs V/mA + RS485 + CT, 115...230Vac/dc