

# ATR121

## Controller with Dual Setpoint



- Low-cost indicating PID controller
- Panel mount
- 2 setpoints
- Universal input
- Relay and SSR outputs
- Universal supply voltage

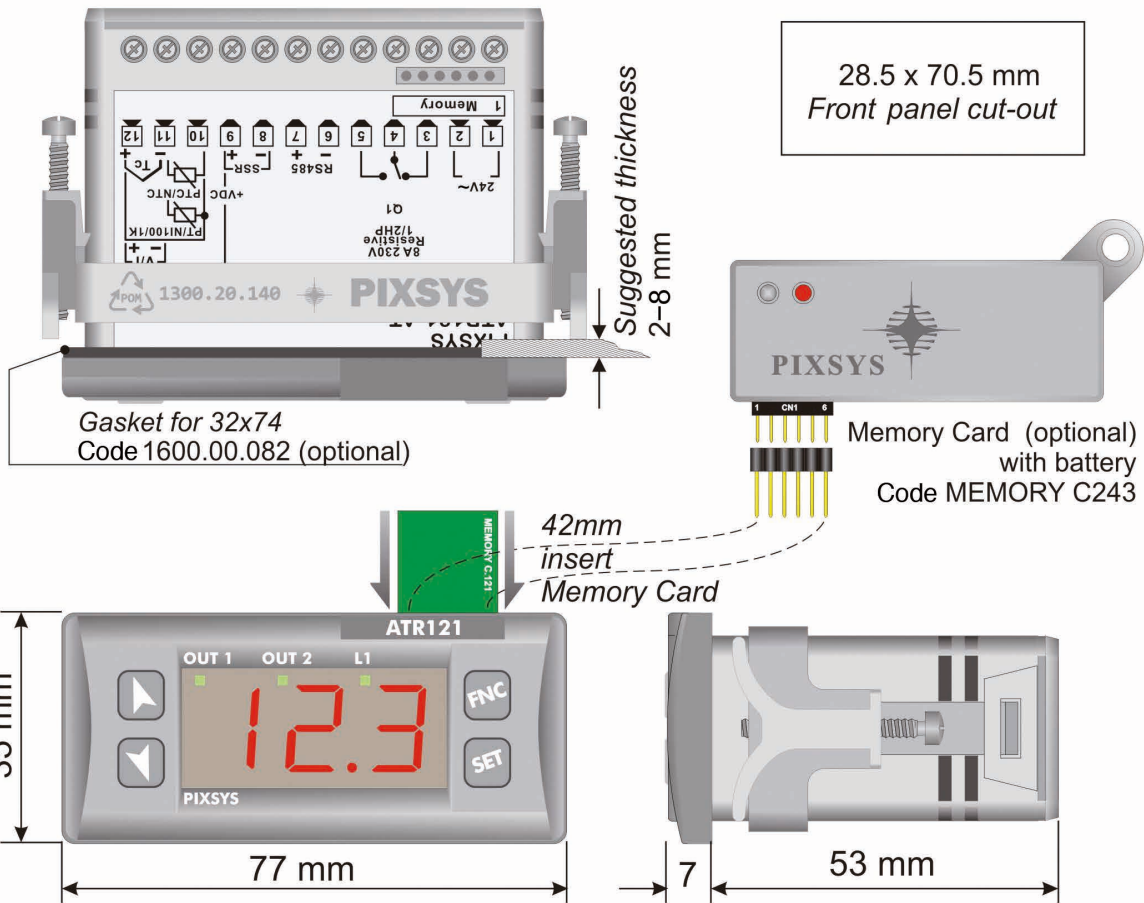
General Specifications	
Inputs	1 input, configurable for J, K, R or S thermocouples; Pt100; Ni100; Pt500; Pt1000; PTC; NTC; 0/4 to 20mA; 0 to 10VDC; potentiometers $\leq 6k\Omega$ or $\leq 150k\Omega$
Outputs	Control relay 8 A; Alarm relay 5 A; SSR Control/Alarm; Open/Close logic (time-proportioned), RS485 Modbus RTU Slave (-ADT models)
Control Action	ON/OFF; PID Autotuning; Heating/Cooling PID
Configuration	Via push-button controls, or memory card, or LABSOFTVIEW software. Parameters protected by password
Display	3-digit red LED plus decimal point; green status LEDs
Accuracy	0.5% $\pm$ 1 digit for TC/RTD; 0.2% $\pm$ 1 digit for mA/V
Sampling Time	66 ms (selectable software filter on input and display)
Supply Voltage	230 V AC or 12-24 V AC/DC (depending on model)
Power consumption	2 W
Operating Temperature	0°C to 40°C
Operating Humidity	35% to 95% RH
Sealing	IP54 front panel (IP65 with gasket), IP30 housing, IP20 terminal blocks
Dimensions	32H x 74W x 58D mm
Product Markings	CE, UL, RoHS Compliant

The ATR121 is a dual-setpoint controller with a 3-digit red LED display. The input is configurable for thermocouples type J, K, S & R; Pt100; PTC1000; Ni100; NTC10k (typically used in the refrigeration industry); Pt500/Pt1000 (widely used in air-conditioning); 0 to 1V; 0 to 10V; 0 to 20mA and 4 to 20mA. Potentiometers with a full scale value of 6k $\Omega$  or 150k $\Omega$  may also be used and there is a "latch on" function for quick calibration and setting of minimum, maximum and zero via the front keys.

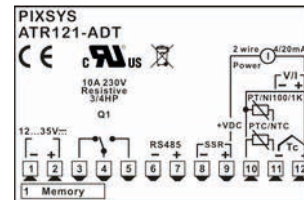
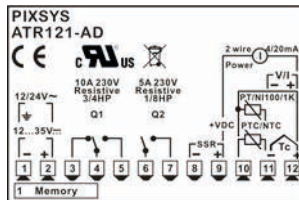
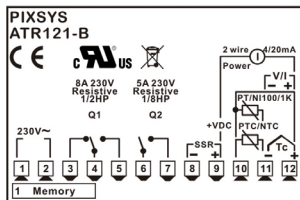
Two set-points are available, one for control and one for the alarm function. They can be configured to activate two relay outputs or an SSR output. The main relay for the control output is rated at 8A. The alarm relay is rated at 5A (alarm modes: threshold, band, deviation). Open/Close logic for motorised valves is also available.

Software features include ON/OFF control, PID + Autotuning and Heating-Cooling PID with a neutral zone. A single output (1 relay + SSR) version is also available.

Front of panel sealing to IP65 can be achieved using a gasket (optional). There is also an optional Memory Card to copy all of the configuration parameters from one controller to another without powering them up.



Model :



Model	Inputs	Outputs	Supply Voltage
ATR121-AD	1 configurable input	2 Relays 8 A + 1 SSR	12-24 V AC/DC (not isolated)
ATR121-B	1 configurable input	2 Relays 8 A + 1 SSR 12 V DC	230 V AC (isolated)
ATR121-ADT	1 configurable input	1 Relay 8 A + 1 SSR 12 V DC + RS485 Modbus RTU Slave	12-24 V AC/DC (not isolated)