

## PID Controller

This block implements continuous- and discrete-time PID control algorithms and includes advanced features such as anti-windup, external reset, and signal tracking. You can tune the PID gains automatically using the 'Tune...' button (requires Simulink Control Design).

Controller: **PID** Form: **Parallel**

Time domain:

Continuous-time  
 Discrete-time

Main PID Advanced Data Types State Attributes

Controller parameters

Proportional (P):   [Compensator formula](#)

Integral (I):

Derivative (D):

Filter coefficient (N):

$$P + I \frac{1}{s} + D \frac{N}{1 + N \frac{1}{s}}$$

**Tune...**

Initial conditions

Source:

Integrator:

Filter:

External reset:

Ignore reset when linearizing  
 Enable zero-crossing detection

OK Cancel Help Apply