

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

Source: 

internal

Proportional (P): 

0

Integral (I): 

0

Derivative (D): 

22.96

Filter coefficient (N): 

220

Tune...

Compensator formula

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

Initial conditions

Source: 

internal

Integrator: 

0

Filter: 

0

External reset: 

none

☐ Ignore reset when linearizing

☒ Enable zero-crossing detection