# watchdog看门狗

**摘要**

看门狗是用于检测和复原程序故障的，通常在设定的时间电脑会周期性的复位看门狗定时器，当出现硬件或软件故障时，电脑就无法复位看门狗，就会报超时信号。

如果任务的运行超过时间了看门狗设置的时间，这个任务将会停止，并伴随故障状态（异常）。任务中的程序出现故障，子程序也会停止，其所有相关的程序都会停止。

**Watchdog timer**

A watchdog timer is an electronic or software timer that is used to detect and recover from computer malfunctions. During normal operation, the computer regularly resets the watchdog timer to prevent it from elapsing, or "timing out". If, due to a hardware fault or program error, the computer fails to reset the watchdog, the timer will elapse and generate a timeout signal. The timeout signal is used to initiate corrective actions. The corrective actions typically include placing the computer system in a safe state and restoring normal system operation.

The default watchdog settings depend on the device.

If the task exceeds the currently set Time of the watchdog, then the task is halted with an error status (exception). The application in whose task the error occurred and its child applications are also halted. In this way, all tasks of the affected applications are also halted. Then the currently defined Sensitivity is also taken into account. If you activate the option Update I/Os in the PLC Settings of the PLC, then CODESYS resets the outputs to the defined default values.