S5TIME (duration)



Format

Data type S5TIME stores the duration in BCD format. The duration is the product from a time in the range 0 to 999 and a time basis. The time basis indicates the interval at which a timer decrements the time value by one unit until it reaches "0". The resolution of the times can be controlled via the time basis.

The following table shows the range of values for data type S5TIME:

Length (bits)	Format	Range of values	Examples of value input
16	S7 time in incre- ments of 10 ms (default value)	S5T#0MS to S5T#2H_46M_30S_0MS	S5T#10s, S5TIME#10s

The following table shows the time base coding for S5TIME:

Time basis	Binary code for time basis
10 ms	00
100 ms	01
1 s	10
10 s	11

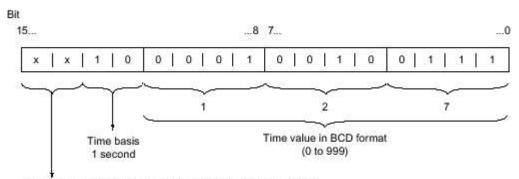
Always observe range limits and the resolution of time values when using data type S5TIME with timers. The table below specifies the range associated with each resolution:

Resolution	Range
0.01 s	10 ms to 9 s 990 ms
0.1 s	100 ms to 1 min 39 s 900 ms
1 s	1 s to 16 min 39 s
10 s	10 s to 2 h 46 min 30 s

Values that exceed 2h46m30s are not accepted.

Example

The following figure shows the content of the time operand for a time value of 127 and a time base of 1 s:



Irrelevant: These bit are disregarded when the timer is started.

See also

Overview of the valid data types Basics of constants Data type conversion for S7-1200 (S7-1200)