

## DATE\_AND\_TIME (date and time of day)

### Format

The DT (DATE\_AND\_TIME) data type saves the information on date and time of day in BCD format.

The following table shows the properties of data type DT:

Length (bytes)	Format	Value range	Example of value input
8	Date and time (year-month-day-hour:minute:second:millisecond <sup>3)</sup> )	Min.: DT#1990-01-01-00:00:00.000  Max.: DT#2089-12-31-23:59:59.999	DT#2008-10-25-08:12:34.567, DATE_AND_TIME#2008-10-25-08:12:34.567

The following table shows the structure of the DT data type:

Byte	Contents	Value range
0	Year	0 to 99 (Years 1990 to 2089) BCD#90 = 1990 ... BCD#0 = 2000 ... BCD#89 = 2089
1	Month	BCD#1 to BCD#12
2	Day	BCD#1 to BCD# 31
3	Hour	BCD#0 to BCD#23
4	Minute	BCD#0 to BCD#59
5	Second	BCD#0 to BCD#59
6	The two most significant digits of MSEC	BCD#0 to BCD#99
7 (4MSB) <sup>1)</sup>	The least significant digit of MSEC	BCD#0 to BCD#9
7 (4LSB) <sup>2)</sup>	Weekday	BCD#1 to BCD#7 BCD#1 = Sunday ... BCD#7 = Saturday
<p>1) MSB: Most significant bit</p> <p>2) LSB: Least significant bit</p> <p>3) Fixed point number</p>		

**See also**

[Overview of the valid data types](#)

[Basics of constants](#)

[Data type conversion for S7-1200 \(S7-1200\)](#)