Date and time parameter specifications

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Seconds

This parameter shall indicate the component “seconds” of the current time of day. This should be reported as the seconds of the current time at UTC; however, it may be reported as the component seconds of the current time at a local time zone. The local hour/minute offset parameters are used to indicate if the time of day is the current UTC time or a local time zone time. The parameter shall be implemented as specified in table 1:

Table 1 — Specification of parameter seconds

Attribute	Value
Data length	1 byte
Resolution	0,25 s/bit
Offset	0 s
Operating range	0 s to 59,75 s
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

Minutes

This parameter shall indicate the component “minutes” of the current time of day. This should be reported as the minutes of the current time at UTC; however, it may be reported as the component minutes of the current time at a local time zone. The local hour/minute offset parameters are used to indicate if the time of day is the current UTC time or a local time zone time. The parameter shall be implemented as specified in Table 2.

Table 2 — Specification of parameter minutes

Attribute	Value
Data length	1 byte

Resolution	1 min/bit
Offset	0 min
Operating range	0 min to 59 min
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

Hours

This parameter shall indicate the component “hour” of the current time of day. This should be reported as the hours of the current time at UTC; however, it may be reported as the component hours of the current time at a local time zone. The local hour/minute offset parameters are used to indicate if the time of day is the current UTC time or a local time zone time. The parameter shall be implemented as specified in Table 3.

Table 3 — Specification of parameter hours

Attribute	Value
Data length	1 byte
Resolution	1 h/bit
Offset	0 h
Operating range	0 h to 23 h
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

Day

This parameter shall indicate the component “day” of the current time of day. This should be reported as the day of the current time at UTC; however, it may be reported as the component day of the current time at a local time zone. The local hour/minute offset parameters are used to indicate if the time of day is the current UTC time or a local time zone time. The parameter shall be implemented as specified in Table 4.

Table 4 — Specification of parameter day

Attribute	Value
Data length	1 byte
Resolution	0,25 d/bit
Offset	0 d
Operating range	0,25 d to 31,75 d
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

NOTE: A value of 0 for the day is null. The values [1, 2, 3, 4] indicate the first day of a month, the values [5, 6, 7, 8] indicate the second day of the month, etc. This parameter does not influence or change the hours parameter above.

Month

This parameter shall indicate the component “month” of the current time of day. This should be reported as the month of the current time at UTC; however, it may be reported as the component month of the current time at a local time zone. The local hour/minute offset parameters are used to indicate if the time of day is the current UTC time or a local time zone time. The parameter shall be implemented as specified in Table 5.

Table 5 — Specification of parameter month

Attribute	Value
Data length	1 byte
Resolution	1 month/bit
Offset	0 month
Operating range	1 month to 12 months
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

NOTE: a value of 0 is null. A value of 1 identifies January, 2 identifies February, etc.

Year

This parameter shall indicate the component “year” of the current time of day. This should be reported as the year of the current time at UTC; however, it may be reported as the component year of the current time at a local time zone. The local hour/minute offset parameters are used to indicate if the time of day is the current UTC time or a local time zone time. The parameter shall be implemented as specified in Table 6.

Table 6 — Specification of parameter year

Attribute	Value
Data length	1 byte
Resolution	1 year/bit
Offset	1985 year
Operating range	1985 year to 2235 year
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

NOTE: a value of 0 identifies year 1985, 1 identifies year 1986, etc.

Local minute offset

This parameter shall indicate the component “minute” of the offset between the UTC time and date and a local time zone time and date, and is defined as the number of minutes to add to UTC time and date to convert into the time and date of local time zone.

— The local offset is a positive value for time zones east of the prime meridian to the International Date Line.

— The local offset is a negative value for time zones west of the prime meridian to the International Date Line.

The local minute offset is only applicable when the time and date parameters are reported as UTC time and date. The parameter shall be implemented as specified in Table 7.

Table 7 — Specification of parameter local minute offset

Attribute	Value
Data length	1 byte
Resolution	1 min/bit
Offset	−125 min
Operating range	−59 min to 59 min
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

NOTE: for the recording unit, it represents an offset from UTC set by the driver. The valid range is further limited by legal requirements.

Local hour offset

This parameter shall indicate the component “hour” of the offset between the UTC time and date and a local time zone time and date, and is defined as the number of hours to add to UTC time and date to convert into the time and date of local time zone.

— The local offset is a positive value for time zones east of the prime meridian to the International Date Line.

— The local offset is a negative value for time zones west of the prime meridian to the International Date Line.

The local hour offset is only applicable when the time and date parameters are reported as UTC time and date. The parameter shall be implemented as specified in Table 8.

Table 8 — Specification of parameter local hour offset

Attribute	Value
Data length	1 byte
Resolution	1 h/bit
Offset	−125 h
Operating range	−23 h to 23 h
Type	Measured
DID	n/a, used as part of other DIDs
Access	-

NOTE: for the recording unit, it represents an offset from UTC set by the driver.

Time and date parameter group

The parameter group is referenced in other parameter specifications and shall be implemented as

specified in Table 9.

Table 9 — Content specification of parameter group time and date

Byte position	Bit position	Parameter
1		Seconds
2		Minutes
3		Hours
4		Day
5		Month
6		Year
7		Local minute offset
8		Local hour offset