Open Metering System Specification

OBIS-Code List

Annex A to
Volume 2 Primary Communication
Issue 4.1.2

RELEASE B (2016-12-16)

Document History

Version	Date	Comment	Editor
A 0.1.0	2013-09-23	Generation of first Draft (not complete)	U.Pahl
A 0.2.0	2013-10-17	Taking over finalised OBIS-List	U.Pahl
A 0.3.0	2014-01-17	Changes according Final vote	U.Pahl
A.0.3.1	2014-01-20	Bugfix Description in OBIS-List Lines 23-26, 29-32, 37-40, 42-64, 128-142	U.Pahl
A 0.3.2	2014-01-25	Editorial Comb. Heat Cool	U.Pahl
A 0.3.3	2014-01-26	Add foot note 8, Add last MB-Tag column in A.3.5, Release A	U.Pahl
B 0.4.0	2016-06-20	Bugfix 1-0:16.7.0×255 and 1-0:15.7.0×255	T.Banz / U.Pahl
B 0.4.1	2016-09-16	Editorial	U.Pahl
B 0.4.2	2016-12-16	Release B	

Table of content

A.1 Overview about the OBIS-Code List

OBIS codes in Smart Metering and other systems are applied as identifiers for metering data and associated information

Each combination of Device type and MB-Tag (refer to OMS-Specification Vol.2 - Annex B) is associated with one OBIS-Code in this OBIS-Code List. But one OBIS-Code may be associated with one or several MB-Tags. There are some OBIS-Codes of COSEM objects for the Device "Generic", for which the information mapped is either derived from message header (like the Device Address) or which are generated by the gateway itself (like receiving time of the message). Such OBIS-Codes are not associated to a dedicated MB-Tag.

Example of assignment:

6-0:1.2.0*255 declares total consumption of imported heat energy (in Watt or Joule) at due date. This OBIS-Code is applied by the gateway if either MB-Tag EW1!D or EJ1!D is received from a meter with one of the M-Bus Device types 04h, 0Ch or 0Dh.

A.2 Legend and Notes

Legends OBIS

M = Mandatory (These data objects have to be specified)
Ax = Alternatively (One of the with 'A' and identical number marked data objects are mandatory)
O = Optional (These data objects do not need to exist)

Note that the B-Field of the OBIS Code shall be built from the subunit in related DIFE of data point (refer to EN13757-3 (2004) subclause 6.10). If the meter uses one channel only then the subunit and also the B-Field of the OBIS -Code shall be 0 (as listed in this table). If a meter uses more than one channel then the subunit and also B-Field of OBIS-Code shall be declare channel number which starts with 1.

Sets of historical billing values, indicated by "f" in value group F of an OBIS-Code, are always coded with a final DIFE with the value 00h. The number of DIFEs is variable. For downward compatibility reasons and for realization of constant data record length it is allowed to use more DIFEs (between the DIF and the final DIFE = 00h) than necessary.

For historical values, indicated by "f" in value group F of an OBIS-Code, the "f" shall be replaced by the content of Storage number X (refer to Annex B)!

For tariff values indicated by "e" in value group E of an OBIS-Code, the "e" shall be replaced by the content of Tariff number T (with T=1...15; refer to Annex B)!

[1] Note that the time stamp "Time, date of reading" (A-0:0.1.2*255 for A=1 or 7 and A-0:0.9.3*255 for A=4, 5, 6, 8 or 9) is calculated by the gateway itself based on the time stamp "Date of device" (A-0:0.9.2*255) and "Time of device" (A-0:0.9.1*255) and the Run time difference (transmitted with DP1!).

[2] Note that for electricity meters supporting power maximum registers (1-0:1.6.0*255 / 1-0:1.6.0*X and 1-0:2.6.0*255 / 1-0:2.6.0*X), the objects containing the actual maximum value and the associated point of time of the actual maximum value must always be transmitted. The transmission of both M-Bus data points shall be within the same M-Bus message.

[3] Note that the MB-Tag DT1! consists of both date and time information and therefore have to be split into two different OBIS codes "Time of device" (A-0:0.9.1*255) and "Date of device" (A-0:0.9.2*255) according the rules of the data type.

[4] This note is intentionally blank

[5] The Application Layer Address (ALA) is transported either in the TPL or in the DLL (if no TPL address field exists (short header)). The byte order for the OBIS-Code payload shall be according [EN13757-3:2013] Table E.5. Note that the order of the address elements in the DLL is different (refer to [EN13757-3:2013] Table 18) and has to be adapted!

[6] The Link Layer Address (LLA) is always transported in the DLL.
Case wM-Bus: If no TPL address field is used (short header) then the LLA is identical with the ALA. The Byte order of the received LLA for wireless M-Bus is according to [EN13757-3:2013] Table 18. The byte order for the OBIS-Code payload shall be adapted according [EN13757-3:2013] Table E.5.
Case M-Bus: The DLL contains a single Byte address (primary address) only. This byte shall be provided in the OBIS-Payload.

[7] In case of a combined heat/cooling meter (Device type 0Dh), the heating application it the leading function. Variables such as:

- Time, date of reading
- Time integral
- Time of device
- Date of device
- Temperature

are global variables which are valid for both (heat and cooling) but only linked to the heat part of the meter.

[8] The referable M-Bus device-types for each OBIS Value Group are shown in the headline (bold) of the column "Description"

A.3 List of OBIS-Codes

A.3.1 OBIS Value Group A = 0: Generic

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag
Generic		**0**	**All**	
Current time	M	0-0:0.9.1×255	Local time (Receiving time of MUC. Data object generated automatically by MUC!)	
Current date	M	0-0:0.9.2×255	Local date (Receiving date of MUC. Data object generated automatically by MUC!)	
Serial number	O	0-0:96.1.0×255	Fabrication number (assigned by the manufacturer)	ID1!
Device address	M	0-0:96.1.1×255	Application Layer Address [5]	
Communication address	M	0-0:96.1.2×255	Link Layer Address [6]	
Ownership number	O	0-0:96.1.9×255	Ownership number (optional)	ID4!
Metering point ID	O	0-0:96.1.10×255	Identification of the metering point	ID5!
Error status	M	0-0:97.97.0×255	Status according to table 4 of EN13757-3 (2004)	

A.3.2 OBIS Value Group A = 1: Electricity

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag		
Electricity		**1**	**02_h**			
Meter reading	O	1-0:0.1.0	Cumulation counter (contains the last written register)	MM7!		
Time, date of reading [1]	O	*1-0:0.1.2×f*	*Time stamp (local time) of the most recent billing period (f=255) or of historical billing periods (f=VZ, VZ-1,…), billing period 1*			
	O	1-0:0.1.2×255	f=255:Time stamp (local time) of the most recent billing period (calculated from Run time difference), billing period 1	DP1!		
	O	1-0:0.1.2×f	f≠255: Time stamp (local time) of historical billing periods (f=VZ, VZ-1,…), billing period 1	DT1!R	DT2!R	
Meter reading	O	1-0:0.8.0×255	Duration of measurement interval for current power value	DP2!		
Time of device [3]	O	1-0:0.9.1×255	Current time at time of transmission	DT1!	DT5!	
Date of device [3]	O	1-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!	
Meter reading	O	*1-0:1.2.e×255*	*Cumulative maximum of active power import (+P)*			
	O	1-0:1.2.0×255	Cumulative maximum of active power import (+P), total	PW4!AC		
	O	1-0:1.2.e×255	Cumulative maximum of active power import (+P), tariff 1-15	PW4!ACT		
Meter reading [2]	O	*1-0:1.6.e×f*	*Actual maximum of active power import (+P) (value + time stamp)*			
	O	1-0:1.6.0×255	f=255: Actual maximum of active power import (+P), current value, total (value + time stamp)	DT1!A	DT2!A	PW1!A
	O	1-0:1.6.e×255	f=255: Actual maximum of active power import (+P), current value, tariff 1..15 (value + time stamp)	DT1!AT	DT2!AT	PW1!AT
	O	1-0:1.6.0×f	f≠255: Actual maximum of active power import (+P), recent value for billing, total (value + time stamp)	DT1!AR	DT2!AR	PW1!AR
	O	1-0:1.6.e×f	f≠255: Actual maximum of active power import (+P), recent value for billing, tariff 1..15 (value + time stamp)	DT1!ART	DT2!ART	PW1!ART
Meter reading	O	1-0:1.7.0×255	Active power import (+P), current value	PW1!		
Meter reading	A1	*1-0:1.8.e×f*	*Active energy import (+A)*			
-	A1	1-0:1.8.0×255	f=255: Active energy import (+A), current value, total	EW1!		

-	O	1-0:1.8.e×255	f=255: Active energy import (+A), current value, tariff 1-15	EW1!T		
-	O	1-0:1.8.0×f	f≠255: Active energy import (+A), recent value for billing, total	EW1!R		
-	O	1-0:1.8.e×f	f≠255: Active energy import (+A), recent value for billing, tariff 1-15	EW1!RT		
Meter reading	*O*	*1-0:2.2.e×255*	*Cumulative maximum of active power export (-P)*			
	O	1-0:2.2.0×255	Cumulative maximum of active power export (-P), total	PW6!AC		
	O	1-0:2.2.e×255	Cumulative maximum of active power export (-P), tariff 1-15	PW6!ACT		
Meter reading [2]	*O*	*1-0:2.6.e×f*	*Actual maximum of active power export (-P), (value + time stamp)*			
	O	1-0:2.6.0×255	f=255: Actual maximum of active power export (-P), current value, total (value + time stamp)	DT3!A	DT4!A	PW3!A
	O	1-0:2.6.e×255	f=255: Actual maximum of active power export (-P), current value, tariff 1..15 (value + time stamp)	DT3!AT	DT4!AT	PW3!AT
	O	1-0:2.6.0×f	f≠255: Actual maximum of active power export (-P), recent value for billing, total (value + time stamp)	DT3!AR	DT4!AR	PW3!AR
	O	1-0:2.6.e×f	f≠255: Actual maximum of active power export (-P), recent value for billing, tariff 1..15 (value + time stamp)	DT3!ART	DT4!ART	PW3!ART
Meter reading	O	1-0:2.7.0×255	Active power export (-P), current value	PW3!		
Meter reading	*A1*	*1-0:2.8.e×f*	*Active energy export (-A)*			
-	A1	1-0:2.8.0×255	f=255: Active energy export (-A), current value, total	EW2!		
-	O	1-0:2.8.e×255	f=255: Active energy export (-A), current value, tariff 1-15	EW2!T		
-	O	1-0:2.8.0×f	f≠255: Active energy export (-A), recent value for billing, total	EW2!R		
-	O	1-0:2.8.e×f	f≠255: Active energy export (-A), recent value for billing, tariff 1-15	EW2!RT		
Meter reading	O	1-0:3.7.0×255	Reactive power import (+Q), current value	RP1!		
Meter reading	*O*	*1-0:3.8.e×f*	*Reactive energy import (+R)*			
	O	1-0:3.8.0×255	f=255: Reactive energy import (+R), current value, total	RE1!		
	O	1-0:3.8.e×255	f=255: Reactive energy import (+R), current value, tariff 1-15	RE1!T		
	O	1-0:3.8.0×f	f≠255: Reactive energy import (+R), recent value for billing, total	RE1!R		
	O	1-0:3.8.e×f	f≠255: Reactive energy import (+R), recent value for billing, tariff 1-15	RE1!RT		
Meter reading	O	1-0:4.7.0×255	Reactive power export (-Q), current value	RP2!		
Meter reading	*O*	*1-0:4.8.e×f*	*Reactive energy export (-R)*			
	O	1-0:4.8.0×255	f=255: Reactive energy export (-R), current value, total	RE2!		

	O	1-0:4.8.e^{x}255	f=255: Reactive energy export (-R), current value, tariff 1-15	RE2!T
	O	1-0:4.8.0^{x}f	f≠255: Reactive energy export (-R), recent value for billing, total	RE2!R
	O	1-0:4.8.e^{x}f	f≠255: Reactive energy export (-R), recent value for billing, tariff 1-15	RE2!RT
Meter reading	O	1-0:14.7.0^{x}255	Supply frequency, instantaneous value	FR1!
Meter reading	O	1-0:15.7.0^{x}255	Active power absolute (|P|), instantaneous value, total	PW7!
Meter reading	*A1*	*1-0:15.8.e^{x}f*	*Active energy import (abs.(A))*	
-	A1	1-0:15.8.0^{x}255	f=255: Active energy import (abs.(A)), current value, total	EW3!
-	O	1-0:15.8.e^{x}255	f=255: Active energy import (abs.(A)), current value, tariff 1-15	EW3!T
-	O	1-0:15.8.0^{x}f	f≠255: Active energy import (abs.(A)), recent value for billing, total	EW3!R
-	O	1-0:15.8.e^{x}f	f≠255: Active energy import (abs.(A)), recent value for billing, tariff 1-15	EW3!RT
Meter reading	O	1-0:16.7.0^{x}255	Active power delta (import - export) (P), instantaneous value, total	PW8!
Meter reading	O	1-0:31.7.0^{x}255	Current at phase L1, instantaneous value	CA1!
Meter reading	O	1-0:32.7.0^{x}255	Voltage at phase L1, instantaneous value	VV1!
Meter reading	O	1-0:51.7.0^{x}255	Current at phase L2, instantaneous value	CA2!
Meter reading	O	1-0:52.7.0^{x}255	Voltage at phase L2, instantaneous value	VV2!
Meter reading	O	1-0:71.7.0^{x}255	Current at phase L3, instantaneous value	CA3!
Meter reading	O	1-0:72.7.0^{x}255	Voltage at phase L3, instantaneous value	VV3!
Meter reading	O	1-0:81.7.1^{x}255	Angle between voltage on phase L1 and L2, instantaneous value	PD1!
Meter reading	O	1-0:81.7.4^{x}255	Angle between voltage and current on phase L1, instantaneous value	PD4!
Meter reading	O	1-0:81.7.12^{x}255	Angle between voltage on phase L2 and L3, instantaneous value	PD2!
Meter reading	O	1-0:81.7.15^{x}255	Angle between voltage and current on phase L2, instantaneous value	PD5!
Meter reading	O	1-0:81.7.20^{x}255	Angle between voltage on phase L3 and L1, instantaneous value	PD3!
Meter reading	O	1-0:81.7.26^{x}255	Angle between voltage and current on phase L3, instantaneous value	PD6!
Meter reading	O	1-0:91.7.0^{x}255	L0 current (neutral), instantaneous value	CA4!

A.3.3 OBIS Value Group A = 4: Heat Cost Allocator

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag	
HCA		**4**	**08$_h$**		
Date of reading	M	4-0:0.1.10×255	Local date at due date	DT2!D	
Time of device [3]	O	4-0:0.9.1×255	Current time at time of transmission	DT1!	
Date of device [3]	O	4-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!
Time, date of reading [1]	O	4-0:0.9.3×255	Time stamp (local time) of the most recent billing period (f=255) (calculated from Run time difference)	DP1!	
Meter reading	M	4-0:1.0.0×255	Unrated integral, current value	HC1!	
Meter reading	M	4-0:1.2.0×255	Unrated integral, due date value	HC1!D	

A.3.4 OBIS Value Group A = 5: Cooling

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag	
Cooling		**5**	**$0A_h$, $0B_h$**		
Date of reading	O	5-0:0.1.10×255	Local date at due date	DT2!D	
Time integral	O	5-0:0.8.5×255	Averaging duration for actual power value	DP2!	
Time of device [3]	O	5-0:0.9.1×255	Current time at time of transmission	DT1!	
Date of device [3]	O	5-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!
Time, date of reading [1]	O	5-0:0.9.3×255	Time stamp (local time) of the most recent billing period (f=255) (calculated from Run time difference)	DP1!	
Meter reading	M	5-0:1.0.0×255	Energy (A), total, current value	EJ1!	EW1!
Meter reading	O	5-0:1.2.0×255	Energy (A), total, due date value	EJ1!D	EW1!D
Meter reading	O	5-0:2.0.0×255	Volume (V), accumulated, total, current value	VM1!	
Meter reading	O	5-0:2.2.0×255	Volume (V), accumulated, total, due date value	VM1!D	
Power	O	5-0:8.0.0×255	Power (energy flow) (P), average, current value	PJ1!	PW1!
Flow rate	O	5-0:9.0.0×255	Flow rate, average (V_a/t), current value	VF1!	
Temperatur	O	5-0:10.0.0×255	Flow temperature, current value	TC1!	
Temperatur	O	5-0:11.0.0×255	Return temperature, current value	TC2!	

A.3.5 OBIS Value Group A = 5: Combined Heat/Cooling (section Cooling)

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag			
Combined Heat/Cooling [7]		**5**	**0D$_h$ (cooling)**				
Meter reading	M	5-0:1.0.0×255	Energy (A), total, current value	EJ1!T	EJ2!	EW1!T	EW2!
Meter reading	O	5-0:1.2.0×255	Energy (A), total, due date value	EJ1!DT	EJ2!D	EW1!DT	EW2!D
Meter reading	O	5-0:2.0.0×255	Volume (V), accumulated, total, current value	VM1!T			
Meter reading	O	5-0:2.2.0×255	Volume (V), accumulated, total, due date value	VM1!DT			
Power	O	5-0:8.0.0×255	Power (energy flow) (P), average, current value	PJ1!T	PW1!T		
Flow rate	O	5-0:9.0.0×255	Flow rate, average (V$_a$/t), current value	VF1!T			

A.3.6 OBIS Value Group A = 6: Heat + Combined Heat/Cooling (section Heat)

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag	
Heat		**6**	**04_h, $0C_h$, $0D_h$(heat)**		
Date of reading	O	6-0:0.1.10×255	Local date at due date	DT2!D	
Time integral	O	6-0:0.8.5×255	Averaging duration for actual flow rate value	DP2!	
Time of device [3]	O	6-0:0.9.1×255	Current time at time of transmission	DT1!	
Date of device [3]	O	6-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!
Time, date of reading [1]	O	6-0:0.9.3×255	Time stamp (local time) of the most recent billing period (f=255) (calculated from Run time difference)	DP1!	
Meter reading	M	6-0:1.0.0×255	Energy (A), total, current value	EJ1!	EW1!
Meter reading	O	6-0:1.2.0×255	Energy (A), total, due date value	EJ1!D	EW1!D
Meter reading	O	6-0:2.0.0×255	Volume (V), accumulated, total, current value	VM1!	
Meter reading	O	6-0:2.2.0×255	Volume (V), accumulated, total, due date value	VM1!D	
Power	O	6-0:8.0.0×255	Power (energy flow) (P), average, current value	PJ1!	PW1!
Flow rate	O	6-0:9.0.0×255	Flow rate, average (V_a/t), current value	VF1!	
Temperatur	O	6-0:10.0.0×255	Flow temperature, current value	TC1!	
Temperatur	O	6-0:11.0.0×255	Return temperature, current value	TC2!	

A.3.7 OBIS Value Group A = 7: Gas

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag	
Gas		**7**	**03$_h$**		
Time, date of reading [1]	O	*7-0:0.1.2×f*	*Time stamp (local time) of the most recent billing period (f=255) or of historical billing periods (f=VZ, VZ-1,…), billing period 1*		
	O	7-0:0.1.2×255	f=255:Time stamp (local time) of the most recent billing period (calculated from Run time difference), billing period 1	DP1!	
	O	7-0:0.1.2×f	f≠255: Time stamp (local time) of historical billing periods (f=VZ, VZ-1,…), billing period 1	DT1!R	DT2!R
Time integral	O	7-0:0.8.28×255	Averaging duration for actual flow rate value	DP2!	
Time of device [3]	O	7-0:0.9.1×255	Current time at time of transmission	DT1!	
Date of device [3]	O	7-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!
Meter reading	A1	*7-0:3.0.e×f*	*Volume (meter), measuring conditions (V_m), forward, absolute*		
	A1	7-0:3.0.0×255	f=255: Volume (meter), measuring conditions (Vm), forward, absolute, current value, total	VM2!	
	O	7-0:3.0.e×255	f=255: Volume (meter), measuring conditions (Vm), forward, absolute, current value, tariff 1-15	VM2!T	
	O	7-0:3.0.0×f	f≠255: Volume (meter), measuring conditions (Vm), forward, absolute, value of historical billing periods (f=VZ, VZ-1,…), total	VM2!R	
	O	7-0:3.0.e×f	f≠255: Volume (meter), measuring conditions (Vm), forward, absolute, value of historical billing periods (f=VZ, VZ-1,…), tariff 1-15	VM2!RT	
Meter reading	A1	*7-0:3.1.e×f*	*Volume (meter), temperature converted (V_{tc}), forward, absolute*		
	A1	7-0:3.1.0×255	f=255: Volume (meter), temperature converted (Vtc), forward, absolute, current value, total	VM1!	
	O	7-0:3.1.e×255	f=255: lume (meter), temperature converted (Vtc), forward, absolute, current value, tariff 1-15	VM1!T	
	O	7-0:3.1.0×f	f≠255: Volume (meter), temperature converted (Vtc), forward, absolute, value of historical billing periods (f=VZ, VZ-1,…), total	VM1!R	

	O	7-0:3.1.e×f	f≠255: Volume (meter), temperature converted (Vtc), forward, absolute, value of historical billing periods (f=VZ, VZ-1,…), tariff 1-15	VM1!RT
Meter reading	*A1*	*7-0:3.2.e×f*	*Volume (meter), base conditions (V$_b$), forward, absolute*	
	A1	7-0:3.2.0×255	f=255: Volume (meter), base conditions (Vb), forward, absolute, current value, total	VM3!
	O	7-0:3.2.e×255	f=255: Volume (meter), base conditions (Vb), forward, absolute, current value, e = tariff 1-15	VM3!T
	O	7-0:3.2.0×f	f≠255: Volume (meter), base conditions (Vb), forward, absolute, value of historical billing periods (f=VZ, VZ-1,…), total	VM3!R
	O	7-0:3.2.e×f	f≠255: Volume (meter), base conditions (Vb), forward, absolute, value of historical billing periods (f=VZ, VZ-1,…), tariff 1-15	VM3!RT
Base temperatur	O	7-0:41.2.0×255	defined Temperature, absolute, at base conditions (T$_b$) or for conversion (T$_{tc}$)	TC3!
Base pressure	O	7-0:42.2.0×255	defined Pressure, absolute, at base conditions (p$_b$)	PR1!
Flow rate	O	7-0:43.15.0×255	Flow rate at measuring conditions, averaging period 1 (default period = 5 min), current interval (V$_m$/t$_1$)	VF2!
Flow rate	O	7-0:43.16.0×255	Flow rate, temperature converted, averaging period 1(default period = 5 min), current interval (V$_{tc}$/t$_1$)	VF1!
Flow rate	O	7-0:43.17.0×255	Flow rate at base conditions, averaging period 1 (default period = 5 min), current interval (V$_b$/t$_1$)	VF3!

A.3.8 OBIS Value Group A = 8: Water

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag	
Cold Water		**8**	**07_h, 16_h**		
Date of reading	O	8-0:0.1.10×255	Local date at due date	DT2!D	
Time integral	O	8-0:0.8.6×255	Averaging duration for actual flow rate value	DP2!	
Time of device [3]	O	8-0:0.9.1×255	Current time at time of transmission	DT1!	
Date of device [3]	O	8-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!
Time, date of reading [1]	O	8-0:0.9.3×255	Time stamp (local time) of the most recent billing period (f=255) (calculated from Run time difference)	DP1!	
Meter reading	M	8-0:1.0.0×255	Volume (V), accumulated, total, current value	VM1!	
Meter reading	O	8-0:1.2.0×255	Volume (V), accumulated, total, due date value	VM1!D	
Flow rate	O	8-0:2.0.0×255	Flow rate, average (V_a/t), current value	VF1!	

A.3.9 OBIS Value Group A = 9: Hot Water

Type	M/O/A	OBIS-Code	Description [8]	MB-Tag	
Hot Water		**9**	**06$_h$, 15$_h$**		
Date of reading	O	9-0:0.1.10×255	Local date at due date	DT2!D	
Time integral	O	9-0:0.8.6×255	Averaging duration for actual flow rate value	DP2!	
Time of device [3]	O	9-0:0.9.1×255	Current time at time of transmission	DT1!	
Date of device [3]	O	9-0:0.9.2×255	Current date at time of transmission	DT1!	DT2!
Time, date of reading [1]	O	9-0:0.9.3×255	Time stamp (local time) of the most recent billing period (f=255) (calculated from Run time difference)	DP1!	
Meter reading	M	9-0:1.0.0×255	Volume (V), accumulated, total, current value	VM1!	
Meter reading	O	9-0:1.2.0×255	Volume (V), accumulated, total, due date value	VM1!D	
Flow rate	O	9-0:2.0.0×255	Flow rate, average (V_a/t), current value	VF1!	