

# **GAS-VOLUME CONVERSION DEVICE**

## **MacBAT 5**

User data structure  
(Ds7.37)

Firmware series: S013.xx

Device uses standard transmission commands according to GAZ-MODEM, ModBUS RTU and ModBUS TCP protocols. Using these protocols there is possibility to send measured data, registered data, information about registered alarms and current time and to change parameters.

## 1 Table of available parameters – DP table

### Legend:

**1** – number of parameter (DP index);

**2** – name of parameter;

**3** – description of parameter;

**4** – exponent, correct value of parameter equal readout value multiply by  $10^e$ ;

**5** – default unit;

**6** – additional information:

M: modifiable parameter;

R: parameter registered with registration period;

O: parameter, which is destined to readout;

D: parameter registered daily, hourly, monthly and according to billing shedule;

^type of parameter;

**7** – modification of the indicated parameter is significant change of configuration (saved in SetupLOG);

**8** – calculation method of registered parameter and its status:

Av: average value from registration period;

C: momentary value in moment of registration;

Su: sum of increments from registration period;

LSu: logic sum from registration period

Min: minimum value from registration period;

**9** – minimum level of privileges for modifications;

2 – READER;

3 – CUSTOMER;

4 – ADMINISTRATOR;

7 – METROLOGIST;

9 – PRODUCER;

**10** – parameter influences the checksum CrcConf;

1	2	3	4	5	6	7	8	9	10
0	Vb	Volume counter at base conditions, undisturbed; Range: 0; 1000000000	0	m3	DRMO ^double	1	C	7	
1	Vm	Volume counter at measurement conditions, total; Range: 0; 100000000	0	m3	DRMO ^double	1	C	4	
2	Vm2	Volume counter at measurement conditions, total (stream 2); Range: 0; 100000000	0	m3	DMO ^double	1	C	4	
3	E	Energy counter, undisturbed; Range: 0; 1000000000	0	kWh	DRMO ^double	1	C	7	
4	M	Mass counter, undisturbed; Range: 0; 1000000000	0	kg	MO ^double	1	C	7	
5	Vme	Volume counter at measurement conditions, disturbed; Range: 0; 100000000	0	m3	DMO ^double	1	C	4	
6	Vbe	Volume counter at base conditions, disturbed; Range: 0; 1000000000	0	m3	DRMO ^double	1	C	7	
7	Ee	Energy counter, disturbed; Range: 0; 1000000000	0	kWh	DRMO ^double	1	C	7	
8	Me	Mass counter, disturbed; Range: 0; 1000000000	0	kg	MO ^double	1	C	7	
9	VbT	Volume counter at base conditions, total	0	m3	DO ^double		C		
10	ET	Energy counter, total	0	kWh	DO ^double		C		
11	MT	Mass counter, total	0	kg	O ^double		C		
12	Vc	Volume counter at measurement conditions, corrected, total; Range: 0; 100000000	0	m3	MO ^double		C	4	
13	VmR	Volume counter at measurement conditions, reverse, total; Range: 0; 100000000	0	m3	MO ^double	1	C	4	

1	2	3	4	5	6	7	8	9	10
14	Vo	Flowmeter counter (encoder readout)	0	m3	O ^double				
15	Vb0	Less significant part of divided counter Vb	0	m3	O ^float		C		
16	Vb1	More significant part of divided counter Vb	4	m3	O ^float		C		
17	Vm0	Less significant part of divided counter Vm	0	m3	O ^float		C		
18	Vm1	More significant part of divided counter Vm	4	m3	O ^float		C		
19	E0	Less significant part of divided counter E	0	kWh	O ^float		C		
20	E1	More significant part of divided counter E	4	kWh	O ^float		C		
21	dVb	Increment of the volume counter at base conditions, undisturbed	0	m3	RO ^double		Su		
22	dVm	Increment of the volume counter at measurement conditions, total	0	m3	RO ^double		Su		
23	dVm2	Increment of the volume counter at measurement conditions, total (stream 2)	0	m3	O ^double		Su		
24	dE	Increment of the energy counter, undisturbed	0	kWh	RO ^double		Su		
25	dM	Increment of the mass counter, undisturbed	0	kg	O ^double		Su		
26	dVme	Increment of the volume counter at measurement conditions, disturbed	0	m3	O ^double		Su		
27	dVbe	Increment of the volume counter at base conditions, disturbed	0	m3	O ^double		Su		
28	dEe	Increment of the energy counter, disturbed	0	kWh	O ^double		Su		
29	dMe	Increment of the mass counter, disturbed	0	kg	O ^double		Su		
30	dVmR	Increment of the volume counter at measurement conditions, reverse, total	0	m3	O ^float				
31	dVbT	Increment of the volume counter at base conditions, total	0	m3	O ^double		Su		
32	dET	Increment of the energy counter, total	0	kWh	O ^double		Su		
33	dMT	Increment of the mass counter, total	0	kg	O ^double		Su		
34	ProgCntCap1	Capacity of the main counters (configuration); Range: 4; 11	0		MO ^uint16	1		4	1
35	ProgCntCap2	Capacity of the counters at measurement conditions (configuration); Range: 4; 11	0		MO ^uint16	1		4	1
36	CntCap1	Capacity of the main counters	0		O ^uint16				
37	CntCap2	Capacity of the counters at measurement conditions	0		O ^uint16				
38	dVbhL1	Limit of hourly increment of volume dVbh, 0 - off; Range: 0; 1000000	0	m3	MO ^float			3	
39	dVbhL2	Limit of hourly increment of volume dVbh, 0 - off; Range: 0; 1000000	0	m3	MO ^float			3	
40	dVbhL3	Limit of hourly increment of volume dVbh, 0 - off; Range: 0; 1000000	0	m3	MO ^float			3	
41	L0dVbh1	Lower limit dVbhL1 expressed in % of parameter. Value 100% means that in period of TL1 value of limit will be constant and equal to dVbhL1. Value less than 100% means, that in period of TL1 value of limit will increase; Range: 0; 100	0	%	MO ^float			3	
42	L0dVbh2	Lower limit dVbhL2 expressed in % of parameter. Value 100% means that in period of TL2 value of limit will be constant and equal to dVbhL2. Value less than 100% means, that in period of TL2 value of limit will increase; Range: 0; 100	0	%	MO ^float			3	
43	CLdVbh1	Current value of dynamic limit dVbhL1	0	m3	O ^float				
44	CLdVbh2	Current value of dynamic limit dVbhL2	0	m3	O ^float				
45	dEhL1	Limit of hourly increment of energy dEh, 0 - off; Range: 0; 1000000	0	kWh	MO ^float			3	
46	dEhL2	Limit of hourly increment of energy dEh, 0 - off; Range: 0; 1000000	0	kWh	MO ^float			3	
47	dEhL3	Limit of hourly increment of energy dEh, 0 - off; Range: 0; 1000000	0	kWh	MO ^float			3	
48	TL1	Period of time measured from beginning of hour, in which alarms of limits 1 dVbh or dEh can be generated; Range: 1; 60	0	min	MO ^uint16			3	
49	TL2	Period of time measured from beginning of hour, in which alarms of limits 2 dVbh or dEh can be generated; Range: 1; 60	0	min	MO ^uint16			3	
50	ephL1	Limit of dVb.eph for event 1, 0 - off; Range: 0; 50000	0	m3	MO ^float			3	
51	ephL2	Limit of dVb.eph for event 2, 0 - off; Range: 0; 50000	0	m3	MO ^float			3	
52	LVmVm2	Limit for comparison of the volume Vm and Vm2 increments; Range: 0; 50000	0	m3	MO ^float			4	1

1	2	3	4	5	6	7	8	9	10
53	TVmVm2	Permissible discrepancy of the volume Vm and Vm2 increments; Range: 1; 100	0	m3	MO ^float			4	1
54	SVm	Increment of test volume counter Vm	0	m3	O ^float				
55	SVm2	Increment of test volume counter Vm2	0	m3	O ^float				
56	Qb	Flow rate at base conditions	0	m3/h	RO ^float		Av		
57	Qm	Flow rate at measurement conditions	0	m3/h	CRO ^float		Av		
58	QE	Energy flow rate	0	kW	O ^float		Av		
59	QM	Mass flow rate	0	kg/h	O ^float		Av		
60	QmRMin	Flowmeter measuring range; Range: 0; 1000000	0	m3/h	MO ^float	1		4	1
61	QmRMax	Flowmeter measuring range; Range: 0; 1000000	0	m3/h	MO ^float	1		4	1
62	QmRMinDly	Bottom delay of opening the flowmeter range event. A value of 100% disables the range control; Range: 0; 100	0	%	MO ^float			4	1
63	QmRMaxDly	Upper delay of opening the flowmeter range event. A value of 100% disables the range control; Range: 0; 100	0	%	MO ^float			4	1
64	QbLMin	Lower limit of flow rate at base conditions; Range: 0; 1000000	0	m3/h	MO ^float			3	
65	QbLMax	Upper limit of flow rate at base conditions; Range: 0; 1000000	0	m3/h	MO ^float			3	
66	QmLMin	Lower limit of flow rate at measurement conditions; Range: 0; 1000000	0	m3/h	MO ^float			3	
67	QmLMax	Upper limit of flow rate at measurement conditions; Range: 0; 1000000	0	m3/h	MO ^float			3	
68	Qm1	Flux under measured conditions from the main input	0	m3/h	O ^float		Av		
69	Qm2	Flow of volume at measurement conditions from the additional input	0	m3/h	O ^float		Av		
70	QmAV	Averaging of the flow; Range: 0; 100	0	%	MO ^uint8			4	1
71	QmLFdec	Acceleration of flow descend; Range: 1; 10	0		MO ^uint8			4	1
72	QmLFtm	Time to reset flowrate at measurement conditions (LF input); Range: 1; 100	0	min	MO ^uint8			4	1
73	QmENTm	Time to reset flowrate at measurement conditions (EN/SCR inputs); Range: 1; 6	0	min	MO ^uint8			4	1
74	LF1	LF1 pulses counter	0	imp	O ^uint32		C		
75	LF2	LF2 pulses counter	0	imp	O ^uint32		C		
76	HF1	HF1 pulses counter	0	imp	O ^uint32		C		
77	HF2	HF2 pulses counter	0	imp	O ^uint32		C		
78	LF1Factor	LF1 pulse rate; Range: 0.0001; 1000	0	imp/m3	MO ^double	1		4	1
79	LF2Factor	LF2 pulse rate; Range: 0.0001; 1000	0	imp/m3	MO ^double	1		4	1
80	HF1Factor	HF1 pulse rate; Range: 0.0001; 1000000	0	imp/m3	MO ^double	1		4	1
81	HF2Factor	HF2 pulse rate; Range: 0.0001; 1000000	0	imp/m3	MO ^double	1		4	1
82	Conflmp	Configuration of counting inputs; Values: 0 - STOP; 30 - LF1; 34 - LF1/LF2; 36 - LF1/HF1; 38 - LF1/SCR; 39 - LF1/EN; 60 - HF1; 63 - HF1/LF1; 67 - HF1/HF2; 68 - HF1/SCR; 69 - HF1/EN; 80 - SCR; 83 - SCR/LF1; 86 - SCR/HF1; 90 - EN; 93 - EN/LF1; 96 - EN/HF1; 134 - Syn-LF1/LF2; 167 - Syn-HF1/HF2	0		MO ^uint8	1		4	1
83	WiegSupp	Wiegand transducer operating mode; Values: 0 - Disabled; 1 - With power; 2 - Without power	0		MO ^uint8			4	1
84	CalibMode	Calibration mode; Range: 0; 1	0		MO ^uint8			7	1
85	ConfADC	ADC pressure transmitter number p1; Values: 1; 2	0		MO ^uint8	1		7	1
86	ConfP1	Installation of pressure sensor p1; Values: 0 - Off; 1 - On	0		MO ^uint8	1		7	1
87	ConfP2	Installation of pressure sensor p2; Values: 0 - Off; 1 - On	0		MO ^uint8	1		4	1
88	ConfT	Installation of temperature sensor t; Values: 0 - Off; 2 - 2W; 4 - 4W	0		MO ^uint8	1		7	1
89	p1	Pressure p1	0	kPa	CRO ^float		Av		
90	p1Type	Pressure source p1; Values: 0 - p1g; 1 - p1abs	0		MO ^uint8			7	1
91	p1abs	Pressure p1 (absolute)	0	kPa	O ^float		Av		
92	p1g	Pressure p1 (overpressure); Values: 0 - Zeroing	0	kPa	MO ^float		Av	7	

1	2	3	4	5	6	7	8	9	10
93	p1St	Status of the pressure p1 sensor	0		O ^uint8				
94	p1SN	Serial number of pressure p1 sensor; Range: 0; 4294967295	0		MO ^uint32	1		7	1
95	p1aCal	Calibration coefficient of input p1; Range: -500; 500	0		MO ^float	1		7	1
96	p1bCal	Calibration coefficient of input p1; Range: -20000; 20000	0	kPa	MO ^float	1		7	1
97	p1RMin	Measuring range of pressure input p1; Range: -50; 12000	0	kPa	MO ^float			7	1
98	p1RMax	Measuring range of pressure input p1; Range: -50; 12000	0	kPa	MO ^float			7	1
99	p1RwMin	Indication range of pressure input p1; Range: -50; 12000	0	kPa	MO ^float			7	1
100	p1RwMax	Indication range of pressure input p1; Range: -50; 12000	0	kPa	MO ^float			7	1
101	p1LWMin	Lower limit of pressure p1 (warning level); Range: -50; 12000	0	kPa	MO ^float			3	
102	p1LWMax	Upper limit of pressure p1 (warning level); Range: -50; 12000	0	kPa	MO ^float			3	
103	p1LAMin	Lower limit of pressure p1 (alarm level); Range: -50; 12000	0	kPa	MO ^float			3	
104	p1LAMax	Upper limit of pressure p1 (alarm level); Range: -50; 12000	0	kPa	MO ^float			3	
105	p1LTm	Delay time of notification of exceeding the limit p1; Range: 0; 3600	0	s	MO ^uint16			3	
106	p1Subst	Substitute pressure p1; Range: -50; 12000	0	kPa	MO ^float	1		4	1
107	AtmPress	Atmospheric pressure	0	kPa	O ^float				
108	AtmPressCal	Calibration coefficient of atmospheric pressure; Range: -10; 10	0	kPa	MO ^float	1		4	1
109	AtmPressMode	AtmPress pressure source; Values: 0 - Meas.; 1 - Const; 2 - SeaLvl	0		MO ^uint8	1		4	1
110	AtmPressConst	AtmPress constant; Range: 60; 120	0	kPa	MO ^float			4	1
111	AtmSeaLvlAlt	Altitude for calculating AtmPress; Range: -500; 9000	0		MO ^float			4	1
112	p2	Pressure p2	0	kPa	CRO ^float		Av		
113	p2Type	Pressure source p2; Values: 0 - p2g; 1 - p2abs	0		MO ^uint8			4	1
114	p2abs	Pressure p2 (absolute)	0	kPa	O ^float		Av		
115	p2g	Pressure p2 (overpressure); Values: 0 - Zeroing	0	kPa	MO ^float		Av	4	
116	p2St	Status of the pressure p2 sensor	0		O ^uint8				
117	p2SN	Serial number of pressure p2 sensor; Range: 0; 4294967295	0		MO ^uint32	1		4	1
118	p2aCal	Calibration coefficient of input p2; Range: -500; 500	0		MO ^float	1		4	1
119	p2bCal	Calibration coefficient of input p2; Range: -20000; 20000	0	kPa	MO ^float	1		4	1
120	p2RMin	Measuring range of pressure input p2; Range: -50; 12000	0	kPa	MO ^float			4	1
121	p2RMax	Measuring range of pressure input p2; Range: -50; 12000	0	kPa	MO ^float			4	1
122	p2RwMin	Indication range of pressure input p2; Range: -50; 12000	0	kPa	MO ^float			4	1
123	p2RwMax	Indication range of pressure input p2; Range: -50; 12000	0	kPa	MO ^float			4	1
124	p2LWMin	Lower limit of pressure p2 (warning level); Range: -50; 12000	0	kPa	MO ^float			3	
125	p2LWMax	Upper limit of pressure p2 (warning level); Range: -50; 12000	0	kPa	MO ^float			3	
126	p2LAMin	Lower limit of pressure p2 (alarm level); Range: -50; 12000	0	kPa	MO ^float			3	
127	p2LAMax	Upper limit of pressure p2 (alarm level); Range: -50; 12000	0	kPa	MO ^float			3	
128	p2LTm	Delay time of notification of exceeding the limit p2; Range: 0; 3600	0	s	MO ^uint16			3	
129	tamb	Ambient temperature tamb	0	'C	RO ^float		Av		
130	tambMode	Measurement mode of tamb; Values: 0 - Meas.; 1 - Int	0		MO ^uint8	1		7	1
131	t	Temperature t	0	'C	CRO ^float		Av		
132	tSt	Status of the Pt1000 sensor	0		O ^uint8				
133	tSN	Serial number of temperature t sensor; Range: 0; 4294967295	0		MO ^uint32			7	1
134	taCal	Calibration coefficient of input t; Range: -50; 100	0		MO ^float	1		7	1
135	tbCal	Calibration coefficient of input t; Range: -50; 100	0	'C	MO ^float	1		7	1
136	tRMin	Measuring range of temperature t; Range: -40; 70	0	'C	MO ^float			7	1
137	tRMax	Measuring range of temperature t; Range: -40; 70	0	'C	MO ^float			7	1
138	tRwMin	Indication range of temperature input t; Range: -40; 80	0	'C	MO ^float			7	1

1	2	3	4	5	6	7	8	9	10
139	tRwMax	Indication range of temperature input t; Range: -40; 80	0	'C	MO ^float			7	1
140	tLMin	Lower limit of temperature t; Range: -50; 100	0	'C	MO ^float			3	
141	tLMax	Upper limit of temperature t; Range: -50; 100	0	'C	MO ^float			3	
142	Pt1000R0	Sensor Pt1000 calibration factor [R0]	0		MO ^double	1		7	1
143	Pt1000A	Sensor Pt1000 calibration factor [A]	0		MO ^double	1		7	1
144	Pt1000B	Sensor Pt1000 calibration factor [B]	0		MO ^double	1		7	1
145	Pt1000C	Sensor Pt1000 calibration factor [C]	0		MO ^double	1		7	1
146	tSubst	Substitute temperature t; Range: -50; 100	0	'C	MO ^float	1		4	1
147	VCDType	Volume conversion type	0		O ^string				
148	ConfAlgZ	Algorithm of Z factor; Values: 0 - AGA8-92DC; 1 - SGERG-88; 2 - AGA8-G1; 3 - AGA8-G2; 4 - AGA NX19-mod; 5 - K1=Const; 8 - SGERG-mod-H2	0		MO ^uint8	1		4	1
149	AlgSt	Algorithm status	0		O ^uint32		LSu		
150	AlgTest	Algorithm test mode; Values: 0; 1	0		MO ^bool	1		7	1
151	Z	Compressibility factor at measurement conditions	0		O ^float		Av		
152	Zb	Compressibility factor at base conditions	0		O ^float		Av		
153	C	Conversion factor (calculations for base conditions)	0		RO ^float		Av		
154	CLMin	Lower limit of C factor; Range: 0; 400	0		MO ^float			3	
155	CLMax	Upper limit of C factor; Range: 0; 400	0		MO ^float			3	
156	Hi	Inferior calorific value	0	MJ/m3	O ^float		Av		
157	ProgK1	Setting the value of parameter K1; Range: 0.001; 2	0		MO ^float		Av	4	
158	K1	Relative compressibility factor. $K1=Z/Zb$	0		O ^float		Av		
159	W	Wobbe index. $W=Hs/\sqrt{d}$	0	MJ/m3	O ^float		Av		
160	rob	Density at base conditions	0	kg/m3	O ^float		Av		
161	rom	Density at measurement conditions	0	kg/m3	O ^float		Av		
162	VoS	The speed of sound in the medium	0	m/s	O ^float		Av		
163	ConfSGS	Switch of the origin of the components of the simplified gas composition. 0 - from a simplified composition, 1 - calculated from the full composition; Values: 0 - Simpl.; 1 - Full.comp.	0		MO ^bool	1		4	1
164	ProgXH2	Molar contribution of hydrogen in algorithms using simplified gas composition; Range: 0; 100	0	%	MO ^float		Av	4	
165	ProgXCO2	Molar contribution of carbon dioxide in algorithms using simplified gas composition; Range: 0; 100	0	%	MO ^float		Av	4	
166	ProgXN2	Molar contribution of nitrogen in algorithms using simplified gas composition; Range: 0; 100	0	%	MO ^float		Av	4	
167	ProgHs	Superior calorific value in algorithms using simplified gas composition; Range: 0; 150	0	MJ/m3	MO ^float		Av	4	
168	Progd	Relative density in algorithms using simplified gas composition; Range: 0; 2	0		MO ^float		Av	4	
169	XH2	Molar contribution of hydrogen	0	%	O ^float		Av		
170	XCO2	Molar contribution of carbon dioxide	0	%	O ^float		Av		
171	XN2	Molar contribution of nitrogen	0	%	O ^float		Av		
172	Hs	Superior calorific value	0	MJ/m3	O ^float		Av		
173	d	Relative density	0		O ^float		Av		
174	GasProc	Current sum of programmed gas components	0	%	O ^float				
175	GasNorm	Permissible deviation of total sum of gas components from the 100%; Range: 0; 0.02	0	%	MO ^float			4	1
176	C1	Molar contribution of methane; Range: 0; 100	0	%	MO ^float		Av	4	
177	C2	Molar contribution of ethane; Range: 0; 100	0	%	MO ^float		Av	4	
178	C3	Molar contribution of propane; Range: 0; 100	0	%	MO ^float		Av	4	
179	nC4	Molar contribution of n-butane; Range: 0; 100	0	%	MO ^float		Av	4	
180	iC4	Molar contribution of i-butane; Range: 0; 100	0	%	MO ^float		Av	4	
181	nC5	Molar contribution of n-pentane; Range: 0; 100	0	%	MO ^float		Av	4	

1	2	3	4	5	6	7	8	9	10
182	iC5	Molar contribution of i-pentane; Range: 0; 100	0	%	MO ^float		Av	4	
183	neoC5	Molar contribution of neopentane; Range: 0; 100	0	%	MO ^float		Av	4	
184	C6+	Molar contribution of hexane and higher hydrocarbons; Range: 0; 100	0	%	MO ^float		Av	4	
185	N2	Molar contribution of nitrogen; Range: 0; 100	0	%	MO ^float		Av	4	
186	CO2	Molar contribution of carbon dioxide; Range: 0; 100	0	%	MO ^float		Av	4	
187	C6H14	Molar contribution of n-hexane; Range: 0; 100	0	%	MO ^float		Av	4	
188	C7H16	Molar contribution of n-heptane; Range: 0; 100	0	%	MO ^float		Av	4	
189	C8H18	Molar contribution of n-octane; Range: 0; 100	0	%	MO ^float		Av	4	
190	C9H20	Molar contribution of n-nonane; Range: 0; 100	0	%	MO ^float		Av	4	
191	C10H22	Molar contribution of n-decane; Range: 0; 100	0	%	MO ^float		Av	4	
192	H2	Molar contribution of hydrogen; Range: 0; 100	0	%	MO ^float		Av	4	
193	H2O	Molar contribution of water; Range: 0; 100	0	%	MO ^float		Av	4	
194	H2S	Molar contribution of hydrogen sulfide; Range: 0; 100	0	%	MO ^float		Av	4	
195	CO	Molar contribution of carbon oxide; Range: 0; 100	0	%	MO ^float		Av	4	
196	He	Molar contribution of helium; Range: 0; 100	0	%	MO ^float		Av	4	
197	Ar	Molar contribution of argone; Range: 0; 100	0	%	MO ^float		Av	4	
198	O2	Molar contribution of oxygen; Range: 0; 100	0	%	MO ^float		Av	4	
199	AlarmGC	Switch for generating events on changing of gas composition; Values: 0 - Off; 1 - On	0		MO ^uint8	1		4	1
200	T1	Temperature used during calculation of calorific value Hs; Range: 270; 300.2	0	K	MO ^double	1		7	1
201	pb	Base pressure; Range: 0.95; 1.05	0	bar	MO ^double	1		7	1
202	Tb	Base temperature; Range: 270; 300.2	0	K	MO ^double	1		7	1
203	ephTm	Averaging time of flow rates for stabilization of value dVb.eph and dE.eph; Range: 1; 1800	0	s	MO ^uint16			3	
204	dVb.eph	Estimated hourly increment of dVb	0	m3	O ^float				
205	dVbh	Hourly increment of dVb	0	m3	O ^float				
206	dE.eph	Estimated hourly increment of dE	0	kWh	O ^float				
207	dEh	Hourly increment of dE	0	kWh	O ^float				
208	SetPer	Configuration of period of data analysis; Values: 1 - Minute; 2 - Hourly; 5 - Periodic 2	0		MO ^uint8			9	1
209	Tm	Time from the beginning of data analysis period	0	s	O ^uint32				
210	FlowTm	Time duration of flow (during the data analysis period)	0	s	DO ^uint32				
211	p1Avg	Average value of pressure p1 (during the data analysis period)	0	kPa	DRO ^float				
212	p1Min	Minimum value of pressure p1 (during the data analysis period)	0	kPa	DRO ^float				
213	p1Max	Maximum value of pressure p1 (during the data analysis period)	0	kPa	DRO ^float				
214	p2Avg	Average value of pressure p2 (during the data analysis period)	0	kPa	DO ^float				
215	p2Min	Minimum value of pressure p2 (during the data analysis period)	0	kPa	DRO ^float				
216	p2Max	Maximum value of pressure p2 (during the data analysis period)	0	kPa	DRO ^float				
217	tAvg	Average value of temperature t (during the data analysis period)	0	'C	DO ^float				
218	tMin	Minimum value of temperature t (during the data analysis period)	0	'C	DO ^float				
219	tMax	Maximum value of temperature t (during the data analysis period)	0	'C	DO ^float				
220	QmAvg	Average value of flow Qm (during the data analysis period)	0	m3/h	DO ^float				
221	QmMin	Minimum value of flow Qm (during the data analysis period)	0	m3/h	DO ^float				
222	QmMax	Maximum value of flow Qm (during the data analysis period)	0	m3/h	DO ^float				
223	QbAvg	Average value of flow Qb (during the data analysis period)	0	m3/h	DO ^float				
224	QbMin	Minimum value of flow Qb (during the data analysis period)	0	m3/h	DO ^float				
225	QbMax	Maximum value of flow Qb (during the data analysis period)	0	m3/h	DO ^float				

1	2	3	4	5	6	7	8	9	10
226	tambAvg	Average value of ambient temperature tamb (during the data analysis period)	0	'C	DO ^float				
227	tambMin	Minimum value of ambient temperature tamb (during the data analysis period)	0	'C	O ^float				
228	tambMax	Maximum value of ambient temperature tamb (during the data analysis period)	0	'C	O ^float				
229	CAvg	Average value of coefficient C (during the data analysis period)	0		DO ^float				
230	CMin	Minimum value of coefficient C (during the data analysis period)	0		O ^float				
231	CMax	Maximum value of coefficient C (during the data analysis period)	0		O ^float				
232	K1Avg	Average value of coefficient K1 (during the data analysis period)	0		DO ^float				
233	K1Min	Minimum value of coefficient K1 (during the data analysis period)	0		O ^float				
234	K1Max	Maximum value of coefficient K1 (during the data analysis period)	0		O ^float				
235	HsAvg	Average value of Hs (during the data analysis period)	0	MJ/m3	DO ^float				
236	HsMin	Minimum value of Hs (during the data analysis period)	0	MJ/m3	O ^float				
237	HsMax	Maximum value of Hs (during the data analysis period)	0	MJ/m3	O ^float				
238	dAvg	Average value of d (during the data analysis period)	0		DO ^float				
239	dMin	Minimum value of d (during the data analysis period)	0		O ^float				
240	dMax	Maximum value of d (during the data analysis period)	0		O ^float				
241	dVb.ph	Hourly peak Vb (during the data analysis period)	0	m3	DO ^float				
242	dVb.phTm	Time of hourly peak Vb occurrence (during the data analysis period)	0		DO ^uint32				
243	dVb.pd	Daily peak Vb (during the data analysis period)	0	m3	DO ^float				
244	dVb.pdTm	Time of daily peak Vb occurrence (during the data analysis period)	0		DO ^uint32				
245	dVm.ph	Hourly peak Vm (during the data analysis period)	0	m3	DO ^float				
246	dVm.phTm	Time of hourly peak Vm occurrence (during the data analysis period)	0		DO ^uint32				
247	dVm.pd	Daily peak Vm (during the data analysis period)	0	m3	DO ^float				
248	dVm.pdTm	Time of daily peak Vm occurrence (during the data analysis period)	0		DO ^uint32				
249	dVbSum	Increment of Vb (during the data analysis period)	0	m3	DO ^double				
250	dVbeSum	Increment of Vbe (during the data analysis period)	0	m3	DO ^double				
251	dVbTSum	Increment of VbT (during the data analysis period)	0	m3	DO ^double				
252	dVmSum	Increment of Vm (during the data analysis period)	0	m3	DO ^double				
253	dVmeSum	Increment of Vme (during the data analysis period)	0	m3	O ^double				
254	p1Avg.hp	Average value of pressure p1 (previous hour)	0	kPa	O ^float				
255	p1Min.hp	Minimum value of pressure p1 (previous hour)	0	kPa	O ^float				
256	p1Max.hp	Maximum value of pressure p1 (previous hour)	0	kPa	O ^float				
257	p2Avg.hp	Average value of pressure p2 (previous hour)	0	kPa	O ^float				
258	p2Min.hp	Minimum value of pressure p2 (previous hour)	0	kPa	O ^float				
259	p2Max.hp	Maximum value of pressure p2 (previous hour)	0	kPa	O ^float				
260	tAvg.hp	Average value of temperature t (previous hour)	0	'C	O ^float				
261	tMin.hp	Minimum value of temperature t (previous hour)	0	'C	O ^float				
262	tMax.hp	Maximum value of temperature t (previous hour)	0	'C	O ^float				
263	dVb.ph.hp	Hourly peak Vb (previous hour)	0	m3	O ^float				
264	dVb.phTm.hp	Time of hourly peak Vb occurrence (previous hour)	0		O ^uint32				
265	dVbSum.hp	Increment of Vb (previous hour)	0	m3	O ^double				
266	dVbeSum.hp	Increment of Vbe (previous hour)	0	m3	O ^double				
267	dVbTSum.hp	Increment of VbT (previous hour)	0	m3	O ^double				
268	dVmSum.hp	Increment of Vm (previous hour)	0	m3	O ^double				



1	2	3	4	5	6	7	8	9	10
269	dVmeSum.hp	Increment of Vme (previous hour)	0	m3	O ^double				
270	dE.ph	Hourly peak E (during the data analysis period)	0	kWh	DO ^float				
271	dE.phTm	Time of hourly peak E occurrence (during the data analysis period)	0		DO ^uint32				
272	dESum	Increment of E (during the data analysis period)	0	kWh	DO ^double				
273	dEeSum	Increment of Ee (during the data analysis period)	0	kWh	DO ^double				
274	dETSum	Increment of ET (during the data analysis period)	0	kWh	DO ^double				
275	dE.ph.hp	Hourly peak E (previous hour)	0	kWh	O ^float				
276	dE.phTm.hp	Time of hourly peak E occurrence (previous hour)	0		O ^uint32				
277	dESum.hp	Increment of E (previous hour)	0	kWh	O ^double				
278	dEeSum.hp	Increment of Ee (previous hour)	0	kWh	O ^double				
279	dETSum.hp	Increment of ET (previous hour)	0	kWh	O ^double				
280	SysStSum	System status (during the data analysis period)	0		O ^uint32				
281	Alarm1Sum	Binary state of alarms with codes 0..63 (during the data analysis period)	0		DO ^uint64				
282	Alarm2Sum	Binary state of alarms with codes 64..127 (during the data analysis period)	0		O ^uint64				
283	Alarm3Sum	Binary state of alarms with codes 128..191 (during the data analysis period)	0		O ^uint64				
284	SysStSum.hp	System status (previous hour)	0		O ^uint32				
285	Alarm1Sum.hp	Binary state of alarms with codes 0..63 (previous hour)	0		O ^uint64				
286	Alarm2Sum.hp	Binary state of alarms with codes 64..127 (previous hour)	0		O ^uint64				
287	Alarm3Sum.hp	Binary state of alarms with codes 128..191 (previous hour)	0		O ^uint64				
288	SetPer.dc	Period of data analysis - day	0		O ^uint8				
289	Tm.dc	Time from the beginning of daily period of data analysis	0	s	O ^uint32				
290	FlowTm.dc	Time duration of flow (current day)	0	s	O ^uint32				
291	p1Avg.dc	Average value of pressure p1 (current day)	0	kPa	O ^float				
292	p1Min.dc	Minimum value of pressure p1 (current day)	0	kPa	O ^float				
293	p1Max.dc	Maximum value of pressure p1 (current day)	0	kPa	O ^float				
294	p2Avg.dc	Average value of pressure p2 (current day)	0	kPa	O ^float				
295	p2Min.dc	Minimum value of pressure p2 (current day)	0	kPa	O ^float				
296	p2Max.dc	Maximum value of pressure p2 (current day)	0	kPa	O ^float				
297	tAvg.dc	Average value of temperature t (current day)	0	'C	O ^float				
298	tMin.dc	Minimum value of temperature t (current day)	0	'C	O ^float				
299	tMax.dc	Maximum value of temperature t (current day)	0	'C	O ^float				
300	QmAvg.dc	Average value of flow Qm (current day)	0	m3/h	O ^float				
301	QmMin.dc	Minimum value of flow Qm (current day)	0	m3/h	O ^float				
302	QmMax.dc	Maximum value of flow Qm (current day)	0	m3/h	O ^float				
303	QbAvg.dc	Average value of flow Qb (current day)	0	m3/h	O ^float				
304	QbMin.dc	Minimum value of flow Qb (current day)	0	m3/h	O ^float				
305	QbMax.dc	Maximum value of flow Qb (current day)	0	m3/h	O ^float				
306	tambAvg.dc	Average value of ambient temperature tamb (current day)	0	'C	O ^float				
307	tambMin.dc	Minimum value of ambient temperature tamb (current day)	0	'C	O ^float				
308	tambMax.dc	Maximum value of ambient temperature tamb (current day)	0	'C	O ^float				
309	CAvg.dc	Average value of coefficient C (current day)	0		O ^float				
310	CMin.dc	Minimum value of coefficient C (current day)	0		O ^float				
311	CMax.dc	Maximum value of coefficient C (current day)	0		O ^float				
312	K1Avg.dc	Average value of coefficient K1 (current day)	0		O ^float				
313	K1Min.dc	Minimum value of coefficient K1 (current day)	0		O ^float				
314	K1Max.dc	Maximum value of coefficient K1 (current day)	0		O ^float				

1	2	3	4	5	6	7	8	9	10
315	HsAvg.dc	Average value of Hs (current day)	0	MJ/m3	O ^float				
316	HsMin.dc	Minimum value of Hs (current day)	0	MJ/m3	O ^float				
317	HsMax.dc	Maximum value of Hs (current day)	0	MJ/m3	O ^float				
318	dAvg.dc	Average value of d (current day)	0		O ^float				
319	dMin.dc	Minimum value of d (current day)	0		O ^float				
320	dMax.dc	Maximum value of d (current day)	0		O ^float				
321	dVb.ph.dc	Hourly peak Vb (current day)	0	m3	O ^float				
322	dVb.phTm.dc	Time of hourly peak Vb occurrence (current day)	0		O ^uint32				
323	dVm.ph.dc	Hourly peak Vm (current day)	0	m3	O ^float				
324	dVm.phTm.dc	Time of hourly peak Vm occurrence (current day)	0		O ^uint32				
325	dVbSum.dc	Increment of Vb (current day)	0	m3	O ^double				
326	dVbeSum.dc	Increment of Vbe (current day)	0	m3	O ^double				
327	dVbTSum.dc	Increment of VbT (current day)	0	m3	O ^double				
328	dVmSum.dc	Increment of Vm (current day)	0	m3	O ^double				
329	dVmeSum.dc	Increment of Vme (current day)	0	m3	O ^double				
330	p1Avg.dp	Average value of pressure p1 (previous day)	0	kPa	O ^float				
331	p1Min.dp	Minimum value of pressure p1 (previous day)	0	kPa	O ^float				
332	p1Max.dp	Maximum value of pressure p1 (previous day)	0	kPa	O ^float				
333	p2Avg.dp	Average value of pressure p2 (previous day)	0	kPa	O ^float				
334	p2Min.dp	Minimum value of pressure p2 (previous day)	0	kPa	O ^float				
335	p2Max.dp	Maximum value of pressure p2 (previous day)	0	kPa	O ^float				
336	tAvg.dp	Average value of temperature t (previous day)	0	'C	O ^float				
337	tMin.dp	Minimum value of temperature t (previous day)	0	'C	O ^float				
338	tMax.dp	Maximum value of temperature t (previous day)	0	'C	O ^float				
339	dVb.ph.dp	Hourly peak Vb (previous day)	0	m3	O ^float				
340	dVb.phTm.dp	Time of hourly peak Vb occurrence (previous day)	0		O ^uint32				
341	dVm.ph.dp	Hourly peak Vm (previous day)	0	m3	O ^float				
342	dVm.phTm.dp	Time of hourly peak Vm occurrence (previous day)	0		O ^uint32				
343	dVbSum.dp	Increment of Vb (previous day)	0	m3	O ^double				
344	dVbeSum.dp	Increment of Vbe (previous day)	0	m3	O ^double				
345	dVbTSum.dp	Increment of VbT (previous day)	0	m3	O ^double				
346	dVmSum.dp	Increment of Vm (previous day)	0	m3	O ^double				
347	dVmeSum.dp	Increment of Vme (previous day)	0	m3	O ^double				
348	dE.ph.dc	Hourly peak E (current day)	0	kWh	O ^float				
349	dE.phTm.dc	Time of hourly peak E occurrence (current day)	0		O ^uint32				
350	dESum.dc	Increment of E (current day)	0	kWh	O ^double				
351	dEeSum.dc	Increment of Ee (current day)	0	kWh	O ^double				
352	dETSum.dc	Increment of ET (current day)	0	kWh	O ^double				
353	dE.ph.dp	Hourly peak E (previous day)	0	kWh	O ^float				
354	dE.phTm.dp	Time of hourly peak E occurrence (previous day)	0		O ^uint32				
355	dESum.dp	Increment of E (previous day)	0	kWh	O ^double				
356	dEeSum.dp	Increment of Ee (previous day)	0	kWh	O ^double				
357	dETSum.dp	Increment of ET (previous day)	0	kWh	O ^double				
358	SysStSum.dc	System status (current day)	0		O ^uint32				
359	Alarm1Sum.dc	Binary state of alarms with codes 0..63 (current day)	0		O ^uint64				
360	Alarm2Sum.dc	Binary state of alarms with codes 64..127 (current day)	0		O ^uint64				
361	Alarm3Sum.dc	Binary state of activity alarms with codes 128..191 (current day)	0		O ^uint64				

1	2	3	4	5	6	7	8	9	10
362	SysStSum.dp	System status (previous day)	0		O ^uint32				
363	Alarm1Sum.dp	Binary state of alarms with codes 0..63 (previous day)	0		O ^uint64				
364	Alarm2Sum.dp	Binary state of alarms with codes 64..127 (previous day)	0		O ^uint64				
365	Alarm3Sum.dp	Binary state of alarms with codes 128..191 (previous day)	0		O ^uint64				
366	SetPer.mc	Period of data analysis - month	0		O ^uint8				
367	Tm.mc	Time from the beginning of monthly period of data analysis	0	s	O ^uint32				
368	FlowTm.mc	Time duration of flow (current month)	0	s	O ^uint32				
369	p1Avg.mc	Average value of pressure p1 (current month)	0	kPa	O ^float				
370	p1Min.mc	Minimum value of pressure p1 (current month)	0	kPa	O ^float				
371	p1Max.mc	Maximum value of pressure p1 (current month)	0	kPa	O ^float				
372	p2Avg.mc	Average value of pressure p2 (current month)	0	kPa	O ^float				
373	p2Min.mc	Minimum value of pressure p2 (current month)	0	kPa	O ^float				
374	p2Max.mc	Maximum value of pressure p2 (current month)	0	kPa	O ^float				
375	tAvg.mc	Average value of temperature t (current month)	0	'C	O ^float				
376	tMin.mc	Minimum value of temperature t (current month)	0	'C	O ^float				
377	tMax.mc	Maximum value of temperature t (current month)	0	'C	O ^float				
378	QmAvg.mc	Average value of flow Qm (current month)	0	m3/h	O ^float				
379	QmMin.mc	Minimum value of flow Qm (current month)	0	m3/h	O ^float				
380	QmMax.mc	Maximum value of flow Qm (current month)	0	m3/h	O ^float				
381	QbAvg.mc	Average value of flow Qb (current month)	0	m3/h	O ^float				
382	QbMin.mc	Minimum value of flow Qb (current month)	0	m3/h	O ^float				
383	QbMax.mc	Maximum value of flow Qb (current month)	0	m3/h	O ^float				
384	tambAvg.mc	Average value of ambient temperature tamb (current month)	0	'C	O ^float				
385	tambMin.mc	Minimum value of ambient temperature tamb (current month)	0	'C	O ^float				
386	tambMax.mc	Maximum value of ambient temperature tamb (current month)	0	'C	O ^float				
387	CAvg.mc	Average value of coefficient C (current month)	0		O ^float				
388	CMin.mc	Minimum value of coefficient C (current month)	0		O ^float				
389	CMax.mc	Maximum value of coefficient C (current month)	0		O ^float				
390	K1Avg.mc	Average value of coefficient K1 (current month)	0		O ^float				
391	K1Min.mc	Minimum value of coefficient K1 (current month)	0		O ^float				
392	K1Max.mc	Maximum value of coefficient K1 (current month)	0		O ^float				
393	HsAvg.mc	Average value of Hs (current month)	0	MJ/m3	O ^float				
394	HsMin.mc	Minimum value of Hs (current month)	0	MJ/m3	O ^float				
395	HsMax.mc	Maximum value of Hs (current month)	0	MJ/m3	O ^float				
396	dAvg.mc	Average value of d (current month)	0		O ^float				
397	dMin.mc	Minimum value of d (current month)	0		O ^float				
398	dMax.mc	Maximum value of d (current month)	0		O ^float				
399	dVb.ph.mc	Hourly peak Vb (current month)	0	m3	O ^float				
400	dVb.phTm.mc	Time of hourly peak Vb occurrence (current month)	0		O ^uint32				
401	dVb.pd.mc	Daily peak Vb (current month)	0	m3	O ^float				
402	dVb.pdTm.mc	Time of daily peak Vb occurrence (current month)	0		O ^uint32				
403	dVm.ph.mc	Hourly peak Vm (current month)	0	m3	O ^float				
404	dVm.phTm.mc	Time of hourly peak Vm occurrence (current month)	0		O ^uint32				
405	dVm.pd.mc	Daily peak Vm (current month)	0	m3	O ^float				
406	dVm.pdTm.mc	Time of daily peak Vm occurrence (current month)	0		O ^uint32				
407	dVbSum.mc	Increment of Vb (current month)	0	m3	O ^double				
408	dVbeSum.mc	Increment of Vbe (current month)	0	m3	O ^double				

1	2	3	4	5	6	7	8	9	10
409	dVbTSum.mc	Increment of VbT (current month)	0	m3	O ^double				
410	dVmSum.mc	Increment of Vm (current month)	0	m3	O ^double				
411	dVmeSum.mc	Increment of Vme (current month)	0	m3	O ^double				
412	p1Avg.mp	Average value of pressure p1 (previous month)	0	kPa	O ^float				
413	p1Min.mp	Minimum value of pressure p1 (previous month)	0	kPa	O ^float				
414	p1Max.mp	Maximum value of pressure p1 (previous month)	0	kPa	O ^float				
415	p2Avg.mp	Average value of pressure p2 (previous month)	0	kPa	O ^float				
416	p2Min.mp	Minimum value of pressure p2 (previous month)	0	kPa	O ^float				
417	p2Max.mp	Maximum value of pressure p2 (previous month)	0	kPa	O ^float				
418	tAvg.mp	Average value of temperature t (previous month)	0	'C	O ^float				
419	tMin.mp	Minimum value of temperature t (previous month)	0	'C	O ^float				
420	tMax.mp	Maximum value of temperature t (previous month)	0	'C	O ^float				
421	dVb.ph.mp	Hourly peak Vb (previous month)	0	m3	O ^float				
422	dVb.phTm.mp	Time of hourly peak Vb occurrence (previous month)	0		O ^uint32				
423	dVb.pd.mp	Daily peak Vb (previous month)	0	m3	O ^float				
424	dVb.pdTm.mp	Time of daily peak Vb occurrence (previous month)	0		O ^uint32				
425	dVm.ph.mp	Hourly peak Vm (previous month)	0	m3	O ^float				
426	dVm.phTm.mp	Time of hourly peak Vm occurrence (previous month)	0		O ^uint32				
427	dVm.pd.mp	Daily peak Vm (previous month)	0	m3	O ^float				
428	dVm.pdTm.mp	Time of daily peak Vm occurrence (previous month)	0		O ^uint32				
429	dVbSum.mp	Increment of Vb (previous month)	0	m3	O ^double				
430	dVbeSum.mp	Increment of Vbe (previous month)	0	m3	O ^double				
431	dVbTSum.mp	Increment of VbT (previous month)	0	m3	O ^double				
432	dVmSum.mp	Increment of Vm (previous month)	0	m3	O ^double				
433	dVmeSum.mp	Increment of Vme (previous month)	0	m3	O ^double				
434	dE.ph.mc	Hourly peak E (current month)	0	kWh	O ^float				
435	dE.phTm.mc	Time of hourly peak E occurrence (current month)	0		O ^uint32				
436	dESum.mc	Increment of E (current month)	0	kWh	O ^double				
437	dEeSum.mc	Increment of Ee (current month)	0	kWh	O ^double				
438	dETSum.mc	Increment of ET (current month)	0	kWh	O ^double				
439	dE.ph.mp	Hourly peak E (previous month)	0	kWh	O ^float				
440	dE.phTm.mp	Time of hourly peak E occurrence (previous month)	0		O ^uint32				
441	dESum.mp	Increment of E (previous month)	0	kWh	O ^double				
442	dEeSum.mp	Increment of Ee (previous month)	0	kWh	O ^double				
443	dETSum.mp	Increment of ET (previous month)	0	kWh	O ^double				
444	SysStSum.mc	System status (current month)	0		O ^uint32				
445	Alarm1Sum.mc	Binary state of alarms with codes 0..63 (current month)	0		O ^uint64				
446	Alarm2Sum.mc	Binary state of alarms with codes 64..127 (current month)	0		O ^uint64				
447	Alarm3Sum.mc	Binary state of activity alarms with codes 128..191 (current month)	0		O ^uint64				
448	SysStSum.mp	System status (previous month)	0		O ^uint32				
449	Alarm1Sum.mp	Binary state of alarms with codes 0..63 (previous month)	0		O ^uint64				
450	Alarm2Sum.mp	Binary state of alarms with codes 64..127 (previous month)	0		O ^uint64				
451	Alarm3Sum.mp	Binary state of alarms with codes 128..191 (previous month)	0		O ^uint64				
452	CurveCorr	Switch of correction according to error curve of flowmeter; Values: 0 - Off; 1 - On	0		MO ^uint8	1		4	1
453	FP1	Flowmeter error at point 1; Range: -5; 5	0	%	MO ^float	1		4	1
454	FP2	Flowmeter error at point 2; Range: -5; 5	0	%	MO ^float	1		4	1

1	2	3	4	5	6	7	8	9	10
455	FP3	Flowmeter error at point 3; Range: -5; 5	0	%	MO ^float	1		4	1
456	FP4	Flowmeter error at point 4; Range: -5; 5	0	%	MO ^float	1		4	1
457	FP5	Flowmeter error at point 5; Range: -5; 5	0	%	MO ^float	1		4	1
458	FP6	Flowmeter error at point 6; Range: -5; 5	0	%	MO ^float	1		4	1
459	FP7	Flowmeter error at point 7; Range: -5; 5	0	%	MO ^float	1		4	1
460	FP8	Flowmeter error at point 8; Range: -5; 5	0	%	MO ^float	1		4	1
461	FP9	Flowmeter error at point 9; Range: -5; 5	0	%	MO ^float	1		4	1
462	FP10	Flowmeter error at point 10; Range: -5; 5	0	%	MO ^float	1		4	1
463	QP1	Value of flow in point 1 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
464	QP2	Value of flow in point 2 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
465	QP3	Value of flow in point 3 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
466	QP4	Value of flow in point 4 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
467	QP5	Value of flow in point 5 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
468	QP6	Value of flow in point 6 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
469	QP7	Value of flow in point 7 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
470	QP8	Value of flow in point 8 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
471	QP9	Value of flow in point 9 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
472	QP10	Value of flow in point 10 of flowmeter correction function; Range: 0; 100000	0	m3/h	MO ^float	1		4	1
473	FQ	Flowmeter correction function	0		O ^float		C		
474	Dtau	Registration period; Values: 1; 2; 3; 4; 5; 6; 10; 12; 15; 20; 30; 60	0	min	MO ^uint16	1		4	1
475	RegTWeek	Periodic registration 2 (days of the week); Range: 0; 255	0		MO ^uint8			4	1
476	RegTMonth	Periodic registration 2 (months); Range: 0; 4095	0		MO ^uint16			4	1
477	RegTDay	Periodic registration 2 (days); Range: 0; 4294967295	0		MO ^uint32			4	1
478	RegTHour	Periodic registration 2 (hours); Range: 0; 16777215	0		MO ^uint32			4	1
479	RegTNext	Nearest time for periodic registration 2	0		O ^string				
480	SingleReg	Single registration request; Range: 0; 4294967295	0		MO ^uint32			4	1
481	BillingHour	Billing hour; Range: 0; 23	0	h	MO ^uint8	1		4	1
482	BillingDay	Billing day; Range: 1; 31	0	day	MO ^uint8	1		4	1
483	StampOffset	Registration time stamp (beginning or end of the period); Values: 0 - Begin; 1 - End	0		MO ^bool	1		7	1
484	AddRegR1	Parameter 1 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
485	AddRegR2	Parameter 2 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
486	AddRegR3	Parameter 3 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
487	AddRegR4	Parameter 4 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
488	AddRegR5	Parameter 5 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
489	AddRegR6	Parameter 6 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
490	AddRegR7	Parameter 7 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
491	AddRegR8	Parameter 8 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
492	AddRegR9	Parameter 9 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
493	AddRegR10	Parameter 10 in periodic registration; Range: -1; 1239	0		MO ^int16			4	1
494	AddRegD1	Parameter 1 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
495	AddRegD2	Parameter 2 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
496	AddRegD3	Parameter 3 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
497	AddRegD4	Parameter 4 in daily registration; Range: -1; 1239	0		MO ^int16			4	1

1	2	3	4	5	6	7	8	9	10
498	AddRegD5	Parameter 5 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
499	AddRegD6	Parameter 6 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
500	AddRegD7	Parameter 7 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
501	AddRegD8	Parameter 8 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
502	AddRegD9	Parameter 9 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
503	AddRegD10	Parameter 10 in daily registration; Range: -1; 1239	0		MO ^int16			4	1
504	AddRegC1	Parameter 1 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
505	AddRegC2	Parameter 2 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
506	AddRegC3	Parameter 3 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
507	AddRegC4	Parameter 4 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
508	AddRegC5	Parameter 5 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
509	AddRegC6	Parameter 6 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
510	AddRegC7	Parameter 7 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
511	AddRegC8	Parameter 8 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
512	AddRegC9	Parameter 9 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
513	AddRegC10	Parameter 10 in momentary registration; Range: -1; 1239	0		MO ^int16			4	1
514	dRegC1	Criterium for step change of parameter 1 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
515	dRegC2	Criterium for step change of parameter 2 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
516	dRegC3	Criterium for step change of parameter 3 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
517	dRegC4	Criterium for step change of parameter 4 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
518	dRegC5	Criterium for step change of parameter 5 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
519	dRegC6	Criterium for step change of parameter 6 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
520	dRegC7	Criterium for step change of parameter 7 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
521	dRegC8	Criterium for step change of parameter 8 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
522	dRegC9	Criterium for step change of parameter 9 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
523	dRegC10	Criterium for step change of parameter 10 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
524	RegC1LMin	Lower limit of step change control of parameter 1 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
525	RegC1LMax	Upper limit of step change control of parameter 1 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
526	RegC2LMin	Lower limit of step change control of parameter 2 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
527	RegC2LMax	Upper limit of step change control of parameter 2 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
528	RegC3LMin	Lower limit of step change control of parameter 3 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
529	RegC3LMax	Upper limit of step change control of parameter 3 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
530	RegC4LMin	Lower limit of step change control of parameter 4 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
531	RegC4LMax	Upper limit of step change control of parameter 4 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
532	RegC5LMin	Lower limit of step change control of parameter 5 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
533	RegC5LMax	Upper limit of step change control of parameter 5 in momentary registration; Range: 0; 100000	0		MO ^float			4	1
534	TestRegC	Duration of the emergency tracking mode; Range: 0; 30	0	s	MO ^uint8			4	1
535	MainScr1	Main screen, parameter line 1; Range: -5; 1239	0		MO ^int16			4	1
536	MainScr2	Main screen, parameter line 2; Range: -5; 1239	0		MO ^int16			4	1
537	MainScr3	Main screen, parameter line 3; Range: -5; 1239	0		MO ^int16			4	1

1	2	3	4	5	6	7	8	9	10
538	MainScr4	Main screen, parameter line 4; Range: -5; 1239	0		MO ^int16			4	1
539	MainScr5	Main screen, parameter line 5; Range: -5; 1239	0		MO ^int16			4	1
540	MainScr6	Main screen, parameter line 6; Range: -5; 1239	0		MO ^int16			4	1
541	UParam1	User menu parameter 1; Range: -5; 1239	0		MO ^int16			4	1
542	UParam2	User menu parameter 2; Range: -5; 1239	0		MO ^int16			4	1
543	UParam3	User menu parameter 3; Range: -5; 1239	0		MO ^int16			4	1
544	UParam4	User menu parameter 4; Range: -5; 1239	0		MO ^int16			4	1
545	UParam5	User menu parameter 5; Range: -5; 1239	0		MO ^int16			4	1
546	UParam6	User menu parameter 6; Range: -5; 1239	0		MO ^int16			4	1
547	UParam7	User menu parameter 7; Range: -5; 1239	0		MO ^int16			4	1
548	UParam8	User menu parameter 8; Range: -5; 1239	0		MO ^int16			4	1
549	UParam9	User menu parameter 9; Range: -5; 1239	0		MO ^int16			4	1
550	UParam10	User menu parameter 10; Range: -5; 1239	0		MO ^int16			4	1
551	UParam11	User menu parameter 11; Range: -5; 1239	0		MO ^int16			4	1
552	UParam12	User menu parameter 12; Range: -5; 1239	0		MO ^int16			4	1
553	UParam13	User menu parameter 13; Range: -5; 1239	0		MO ^int16			4	1
554	UParam14	User menu parameter 14; Range: -5; 1239	0		MO ^int16			4	1
555	UParam15	User menu parameter 15; Range: -5; 1239	0		MO ^int16			4	1
556	UParam16	User menu parameter 16; Range: -5; 1239	0		MO ^int16			4	1
557	UParam17	User menu parameter 17; Range: -5; 1239	0		MO ^int16			4	1
558	UParam18	User menu parameter 18; Range: -5; 1239	0		MO ^int16			4	1
559	UParam19	User menu parameter 19; Range: -5; 1239	0		MO ^int16			4	1
560	UParam20	User menu parameter 20; Range: -5; 1239	0		MO ^int16			4	1
561	Widget2Type	Widget 2 data type; Values: 1 - Minute; 2 - Hourly; 3 - Daily; 4 - Monthly; 5 - Periodic 2	0		MO ^uint8			4	1
562	Widget2Rec	Number of widget 2 samples; Range: 5; 30	0		MO ^uint8			4	1
563	Widget2Par1	Parameter 1 for presentation on widget 2; Range: -1; 1239	0		MO ^int16			4	1
564	Widget2Par2	Parameter 2 for presentation on widget 2; Range: -1; 1239	0		MO ^int16			4	1
565	Widget2Mode	Data presentation type on the widget 2; Values: 1 - 0-Max; 2 - Min-Max	0		MO ^uint8			4	1
566	Widget2Title	Widget 2 title; Character string, length: 0; 10	0		MO ^string			4	1
567	Widget3Type	Widget 3 data type; Values: 1 - Minute; 2 - Hourly; 3 - Daily; 4 - Monthly; 5 - Periodic 2	0		MO ^uint8			4	1
568	Widget3Rec	Number of widget 3 samples; Range: 5; 30	0		MO ^uint8			4	1
569	Widget3Par1	Parameter 1 for presentation on widget 3; Range: -1; 1239	0		MO ^int16			4	1
570	Widget3Par2	Parameter 2 for presentation on widget 3; Range: -1; 1239	0		MO ^int16			4	1
571	Widget3Mode	Data presentation type on the widget 3; Values: 1 - 0-Max; 2 - Min-Max	0		MO ^uint8			4	1
572	Widget3Title	Widget 3 title; Character string, length: 0; 10	0		MO ^string			4	1
573	Widget4Type	Widget 4 data type; Values: 1 - Minute; 2 - Hourly; 3 - Daily; 4 - Monthly; 5 - Periodic 2	0		MO ^uint8			4	1
574	Widget4Rec	Number of widget 4 samples; Range: 5; 30	0		MO ^uint8			4	1
575	Widget4Par1	Parameter 1 for presentation on widget 4; Range: -1; 1239	0		MO ^int16			4	1
576	Widget4Par2	Parameter 2 for presentation on widget 4; Range: -1; 1239	0		MO ^int16			4	1
577	Widget4Mode	Data presentation type on the widget 4; Values: 1 - 0-Max; 2 - Min-Max	0		MO ^uint8			4	1
578	Widget4Title	Widget 4 title; Character string, length: 0; 10	0		MO ^string			4	1
579	SetupLOG	Level of SetupLOG's memory filling. At level 100%, configuration of important parameters and software updating are stopped	0	%	O ^float				
580	AlarmLOG	Level of alarms' memory filling. At level 100%, configuration of important parameters and software updating are stopped. Setting to 0 clears alarms; Values: 0.000000	0	%	MO ^float	1		4	

1	2	3	4	5	6	7	8	9	10
581	VbLOG	Level of VbLOG's memory filling. At level 100%, configuration is stopped	0	%	O ^float				
582	LockVb	Modification lock Vb. 1-blocked; Range: 0; 1	0		MO ^uint8	1		7	1
583	IndexVb	Index of VbLOG record	0		O ^uint32				
584	IndexE	Amount of all events, which appeared in the device	0		O ^uint32				
585	IndexEM	Amount of all changes on events list	0		O ^uint32				
586	IndexA	Amount of all alarms, which appeared in the device	0		O ^uint32				
587	IndexAM	Amount of all changes on alarms list	0		O ^uint32				
588	IndexTL	Index of TimeLOG record	0		O ^uint32				
589	IndexGL	Index of GasLOG record	0		O ^uint32				
590	IndexBA	Index of BitAlarmLOG record	0		O ^uint32				
591	SYS1	System parameter	0		O ^uint32				
592	SYS2	System parameter	0		O ^uint32				
593	SYS3	System parameter	0		O ^uint32				
594	SysSt	System status	0		O ^uint32		LSu		
595	ConfSt	Configuration status	0		O ^uint32		LSu		
596	InfoSt	Status of general events	0		O ^uint32		LSu		
597	LimitSt	Limits status	0		O ^uint32		LSu		
598	Alarm1	Binary state of alarms with codes 0..63	0		RO ^uint64		LSu		
599	Alarm2	Binary state of alarms with codes 64..127	0		O ^uint64		LSu		
600	Alarm3	Binary state of alarms with codes 128..191	0		O ^uint64		LSu		
601	LastACode	Code of the last recorded alarm or event	0		O ^uint8				
602	LastADate	Date and time of the last recorded alarm or event	0		O ^uint32				
603	GA1	Vector of alarms, which activates Collective alarm A, alarms 0..63; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
604	GA2	Vector of alarms, which activates Collective alarm A, alarms 64..127; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
605	GA3	Vector of alarms, which activates Collective alarm A, alarms 128..191; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
606	GATm	Time of duration Collective alarm A. Value 0 turns off time control - alarm will be active as long as any of controlling alarm is active; Range: 0; 60	0	s	MO ^uint16			4	1
607	GB1	Vector of alarms, which activates Collective alarm B, alarms 0..63; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
608	GB2	Vector of alarms, which activates Collective alarm B, alarms 64..127; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
609	GB3	Vector of alarms, which activates Collective alarm B, alarms 128..191; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
610	GBTm	Time of duration Collective alarm B. Value 0 turns off time control - alarm will be active as long as any of controlling alarm is active; Range: 0; 60	0	s	MO ^uint16			4	1
611	VInfo1	Power supply voltage	0	V	O ^float		Min		
612	VInfo2	Main battery voltage	0	V	O ^float		Min		
613	VInfo3	Modem power supply voltage	0	V	O ^float		Min		
614	VInfo4	Backup battery voltage	0	V	O ^float		Min		
615	EPwrSMode	Operating mode on external power supply; Values: 0 - BATT; 1 - FULL	0		MO ^uint8	1		4	1
616	EPwrSActive	Active operating mode; Values: 0 - BATT; 1 - FULL	0		O ^uint8				
617	EPwrSCheck	External power indicator: 0 - disconnected, 3 - connected	0		O ^uint8				
618	EPwrSSuppReq	Required period of external power supply support from the main battery; Range: 0; 180	0	month	MO ^uint8			4	1
619	EPwrSSuppTm	Estimated period of external power supply support from the main battery	0	month	O ^uint8				
620	EPwrSTm1	Maintaining the operating mode after the failure of external power supply; Range: 0; 1440	0	min	MO ^uint32	1		4	1



1	2	3	4	5	6	7	8	9	10
621	EPwrSTm2	Maintenance of the operating mode with inefficient external power supply; Range: 1; 1440	0	min	MO ^uint32	1		4	1
622	BCT	Period of measuring cycle in BATT mode; Values: 6; 10; 12; 15; 20; 30; 60	0	s	MO ^uint8	1		4	1
623	ETL	Estimated device's running time on battery mode	0	month	O ^float		C		
624	BattLvl	Current level of the device's batteries; Range: 0; 100	0	%	DRMO ^float	1	C	4	
625	MBattLvl	Current level of the modem's batteries; Range: 0; 100	0	%	MO ^float	1	C	4	
626	BattIdx	Amount of the device's batteries; Range: 1; 3	0		MO ^uint8	1		4	1
627	MBattIdx	Amount of the modem's batteries; Range: 0; 2	0		MO ^uint8	1		4	1
628	BattCap	Capacity of 1pcs battery; Range: 10; 25	0	Ah	MO ^uint16	1		4	1
629	BBattLvl	Current backup battery level; Range: 0; 100	0	%	MO ^float	1	C	4	
630	RS232On	RS232 module, switch; Values: 0 - Off; 1 - On	0		MO ^uint8	1		7	1
631	NFCEnable	Binary switch of communication protocols (NFC, b0-GazModem, b1-ModBUS); Range: 0; 3	0		MO ^uint8			4	1
632	COM1Enable	Binary switch of communication protocols (COM1, b0-GazModem, b1-ModBUS); Range: 0; 3	0		MO ^uint8			4	1
633	COM1Bps	Baud rate of transmission (COM1); Values: 2400; 4800; 9600; 19200; 38400; 57600; 115200; 230400; 256000	0	bps	MO ^uint32			4	1
634	COM1Adr	Transmission address (COM1); Range: 1; 65534	0		MO ^uint16			4	1
635	COM1Param	Additional parameters (COM1); Values: 0 - N81; 1 - E81; 2 - O81; 3 - N82; 4 - E72; 5 - O72	0		MO ^uint8			4	1
636	COM1Link	Activity of transmission (COM1)	0		O ^uint8				
637	COM2Enable	Binary switch of communication protocols (COM2, b0-GazModem, b1-ModBUS); Range: 0; 3	0		MO ^uint8			4	1
638	COM2Bps	Baud rate of transmission (COM2); Values: 2400; 4800; 9600; 19200; 38400; 57600; 115200; 230400; 256000	0	bps	MO ^uint32			4	1
639	COM2Adr	Transmission address (COM2); Range: 1; 65534	0		MO ^uint16			4	1
640	COM2Param	Additional parameters (COM2); Values: 0 - N81; 1 - E81; 2 - O81; 3 - N82; 4 - E72; 5 - O72	0		MO ^uint8			4	1
641	COM2Link	Activity of transmission (COM2)	0		O ^uint8				
642	COM3Enable	Binary switch of communication protocols (COM3-OPTO, b0-GazModem, b1-ModBUS); Range: 0; 3	0		MO ^uint8			4	1
643	COM3Bps	Baud rate of transmission (COM3-OPTO); Values: 2400; 4800; 9600; 19200; 38400; 57600; 115200	0	bps	MO ^uint32			4	1
644	COM3Adr	Transmission address (COM3-OPTO); Range: 1; 65534	0		MO ^uint16			4	1
645	COM3Param	Additional parameters (COM3-OPTO); Values: 0 - N81; 1 - E81; 2 - O81; 3 - N82; 4 - E72; 5 - O72	0		MO ^uint8			4	1
646	COM3St	State of Optical interface. Active bits - b0 - head adhibited, b1 - channel active	0		O ^uint8				
647	ComDelay	Answer delay of transmission ports COM; Range: 5; 250	0	ms	MO ^uint8			4	1
648	ComActiveTm	Time to device sleep after transmission; Range: 0; 20	0	s	MO ^uint8			4	1
649	---	-	0		O ^uint8				
650	---	-	0		O ^uint16				
651	MBOrdIntC1	Order of bytes in the ModBUS (integer) (COM1); Range: 12345678; 87654321	0		MO ^uint32			4	1
652	MBOrdFpC1	Order of bytes in the ModBUS (floating point) (COM1); Range: 12345678; 87654321	0		MO ^uint32			4	1
653	MBOrdIntC2	Order of bytes in the ModBUS (integer) (COM2); Range: 12345678; 87654321	0		MO ^uint32			4	1
654	MBOrdFpC2	Order of bytes in the ModBUS (floating point) (COM2); Range: 12345678; 87654321	0		MO ^uint32			4	1
655	MBOrdIntC3	Order of bytes in the ModBUS (integer) (COM3); Range: 12345678; 87654321	0		MO ^uint32			4	1
656	MBOrdFpC3	Order of bytes in the ModBUS (floating point) (COM3); Range: 12345678; 87654321	0		MO ^uint32			4	1
657	MBOrdIntC4	Order of bytes in the ModBUS (integer) (modem); Range: 12345678; 87654321	0		MO ^uint32			4	1
658	MBOrdFpC4	Order of bytes in the ModBUS (floating point) (modem); Range: 12345678; 87654321	0		MO ^uint32			4	1
659	Met701Pwd	Password of user 701, level 7 (Metrologist); Digit sequence, length: 4; 10	0		MO ^string			7	1

1	2	3	4	5	6	7	8	9	10
660	Met702Pwd	Password of user 702, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
661	Met703Pwd	Password of user 703, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
662	Met704Pwd	Password of user 704, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
663	Met705Pwd	Password of user 705, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
664	Adm401Pwd	Password of user 401, level 4 (Administrator); Digit sequence, length: 4; 10	0		MO ^string			4	1
665	Adm402Pwd	Password of user 402, level 4 (Administrator); Digit sequence, length: 0; 10	0		MO ^string			4	1
666	Adm403Pwd	Password of user 403, level 4 (Administrator); Digit sequence, length: 0; 10	0		MO ^string			4	1
667	Adm404Pwd	Password of user 404, level 4 (Administrator); Digit sequence, length: 0; 10	0		MO ^string			4	1
668	Adm405Pwd	Password of user 405, level 4 (Administrator); Digit sequence, length: 0; 10	0		MO ^string			4	1
669	Met706Pwd	Password of user 706, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
670	Met707Pwd	Password of user 707, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
671	Met708Pwd	Password of user 708, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
672	Met709Pwd	Password of user 709, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
673	Met710Pwd	Password of user 710, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
674	Met711Pwd	Password of user 711, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
675	Met712Pwd	Password of user 712, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
676	Met713Pwd	Password of user 713, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
677	Met714Pwd	Password of user 714, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
678	Met715Pwd	Password of user 715, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
679	Met716Pwd	Password of user 716, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
680	Met717Pwd	Password of user 717, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
681	Met718Pwd	Password of user 718, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
682	Met719Pwd	Password of user 719, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
683	Met720Pwd	Password of user 720, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
684	Met721Pwd	Password of user 721, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
685	Met722Pwd	Password of user 722, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
686	Met723Pwd	Password of user 723, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
687	Met724Pwd	Password of user 724, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
688	Met725Pwd	Password of user 725, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
689	Met726Pwd	Password of user 726, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
690	Met727Pwd	Password of user 727, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
691	Met728Pwd	Password of user 728, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
692	Met729Pwd	Password of user 729, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
693	Met730Pwd	Password of user 730, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1

1	2	3	4	5	6	7	8	9	10
694	Met731Pwd	Password of user 731, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
695	Met732Pwd	Password of user 732, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
696	Met733Pwd	Password of user 733, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
697	Met734Pwd	Password of user 734, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
698	Met735Pwd	Password of user 735, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
699	Met736Pwd	Password of user 736, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
700	Met737Pwd	Password of user 737, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
701	Met738Pwd	Password of user 738, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
702	Met739Pwd	Password of user 739, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
703	Met740Pwd	Password of user 740, level 7 (Metrologist); Digit sequence, length: 0; 10	0		MO ^string			7	1
704	Cust301Pwd	Password of user 301, level 3 (Customer); Digit sequence, length: 0; 10	0		MO ^string			3	
705	Cust302Pwd	Password of user 302, level 3 (Customer); Digit sequence, length: 0; 10	0		MO ^string			3	
706	Cust303Pwd	Password of user 303, level 3 (Customer); Digit sequence, length: 0; 10	0		MO ^string			3	
707	Cust304Pwd	Password of user 304, level 3 (Customer); Digit sequence, length: 0; 10	0		MO ^string			3	
708	Cust305Pwd	Password of user 305, level 3 (Customer); Digit sequence, length: 0; 10	0		MO ^string			3	
709	Rdr201Pwd	Password of user 201, level 2 (Reader); Digit sequence, length: 0; 10	0		MO ^string			2	
710	Rdr202Pwd	Password of user 202, level 2 (Reader); Digit sequence, length: 0; 10	0		MO ^string			2	
711	Rdr203Pwd	Password of user 203, level 2 (Reader); Digit sequence, length: 0; 10	0		MO ^string			2	
712	Rdr204Pwd	Password of user 204, level 2 (Reader); Digit sequence, length: 0; 10	0		MO ^string			2	
713	Rdr205Pwd	Password of user 205, level 2 (Reader); Digit sequence, length: 0; 10	0		MO ^string			2	
714	Account	User's account number; Range: 100; 99999999	0		MO ^uint32			1	
715	Password	Password; Range: 0; 9999999999	0		MO ^uint64			1	
716	ConfTrig	Configuration protection switch; Range: 1000000000; 4000000000	0		MO ^uint32			4	
717	SecurLvlMet	Security level (Metrologist); Values: 3; 4	0		MO ^uint8	1		7	1
718	SecurLvlAdm	Security level (Administrator); Values: 1; 2; 3; 4	0		MO ^uint8	1		4	1
719	CustAccess	Access to level 3 parameters with active hardware locks; Values: 0 - Off; 1 - On	0		MO ^uint8	1		4	1
720	LoginLvl	Privileges level of logged-in user	0		O ^uint8				
721	Erasing	Data erasing (main); Values: 1 - Factory reset; 2 - Archives reset; 3 - Default sett.; 4 - SetupLOG reset	0		MO ^uint8			7	
722	ErasingBase	Data erasing (basic); Values: 1 - Factory reset; 2 - Archives reset; 3 - Default sett.	0		MO ^uint8			4	
723	ModelDev	Device hardware configuration; Range: 1000000000; 4000000000	0		MO ^uint32	1		7	1
724	LogoutTm	Time to automatically log out; Range: 0; 1440	0	min	MO ^uint16			4	1
725	LockRead	Restriction of remote access; Range: 0; 1	0		MO ^bool			4	1
726	LockLcd	Block access to the menu. 0 - off, 1 - blocked entry to menu, 2 - blocked main screen; Range: 0; 2	0		MO ^uint8			4	1
727	LockCFG	State of hardware lock "CFG". Value 0 - lock is off, 1 - on	0		O ^bool				
728	LockMET	State of hardware lock "MET". Value 0 - lock is off, 1 - on	0		O ^bool				
729	LockFW1	Software update lock (main); Values: 0 - Off; 1 - On	0		MO ^uint8	1		7	1
730	LockFW2	Block program update in forced mode (auxiliary); Values: 0 - Off; 1 - On	0		MO ^uint8	1		4	1

1	2	3	4	5	6	7	8	9	10
731	LockFW3	Block program update in automatic mode (auxiliary, port: Modem); Values: 0 - Off; 1 - On	0		MO ^uint8	1		4	1
732	LockFW3Acc	Confirmation of automatic program updates (port: Modem)	0		O ^uint32				
733	SVer	Program or resource revision for archive data	0		O ^uint16				
734	UpType	Update type	0		O ^uint8				
735	UpCode	Device's starting code	0		O ^uint32				
736	LastIdx	Number of last modified parameter	0		O ^uint16				
737	LastVal1	Value of parameter before modification	0		O ^double				
738	LastVal2	Value of parameter after modification	0		O ^double				
739	ConfSrc	Interference source (interface). 2-COM1, 3-COM2, 4-COM3, 5-modem, 6-keyboard, 7-NFC	0		O ^uint8				
740	LockTmChg	Lock of time changes without authorization; Values: 0 - Off; 1 - On	0		MO ^uint8			4	1
741	OTS	Previous time stamp	0		O ^uint32				
742	DTStamp	Timestamp for registration (local time)	0		DRO ^uint32				
743	UTCStamp	Timestamp for registration (universal time)	0		DRO ^uint32				
744	AutoDST	Automatic change to summer/winter time; Values: 0 - Off; 1 - On	0		MO ^bool			4	1
745	DT	Current date and time	0		O ^string			4	
746	UTC	Current date and time (UTC)	0		O ^string			4	
747	DTUx	Current date and time (UNIX); Range: 0; 4294967295	0		MO ^uint32			4	
748	UTCux	Current date and time (UNIX UTC); Range: 0; 4294967295	0		MO ^uint32			4	
749	TmZOffset	Time zone (UTC offset); Range: -720; 840	0	min	MO ^int16			4	1
750	DSTmOffset	Offset for DST change; Range: 0; 180	0	min	MO ^int16			4	1
751	STmSet	Moment of transition to winter (standard) time; Range: 0; 4294967295	0		MO ^uint32			4	1
752	DTmSet	Moment of transition to summer (daylight saving) time; Range: 0; 4294967295	0		MO ^uint32			4	1
753	RTCMode	RTC working mode; Values: 1 - Immediate; 2 - Optimal; 3 - Fluent	0		MO ^int8	1		4	1
754	RTCDev	Current RTC deviation	0	s	MO ^int32			4	
755	ConfDT1	Date format DT1; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
756	ConfDT2	Date format DT2; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
757	DT1	Current date and time DT1	0		O ^uint64				
758	DT2	Current date and time DT2	0		O ^uint64				
759	TmChgSum	Deviation of registration time type H	0	s	O ^int32				
760	ConfLang	Currently chosen language;	0		MO ^uint8			3	1
761	Languages	Available languages	0		O ^string				
762	UC1	Unit of pressure; Values: 0 - kPa; 1 - Pa; 2 - MPa; 3 - bar; 4 - mbar; 5 - PSI; 6 - at; 7 - atm; 8 - Torr; 9 - kgf/cm2	0		MO ^uint8	1		7	1
763	UC2	Unit of base pressure; Values: 0 - bar; 1 - Pa; 2 - kPa; 3 - MPa; 4 - mbar; 5 - PSI; 6 - at; 7 - atm; 8 - Torr; 9 - kgf/cm2	0		MO ^uint8	1		7	1
764	UC3	Unit of temperature; Values: 0 - °C; 1 - K; 2 - °R; 3 - °F	0		MO ^uint8	1		7	1
765	UC4	Unit of base temperature; Values: 0 - K; 1 - °C; 2 - °R; 3 - °F	0		MO ^uint8	1		7	1
766	UC5	Unit of volume; Values: 0 - m3. m3/h. imp/m3; 1 - ft3. ft3/h. imp/ft3	0		MO ^uint8	1		7	1
767	UC6	Unit of energy; Values: 0 - kWh. kW; 1 - MJ. MJ/h; 2 - Btu. Btu/h; 3 - kcal. kcal/h; 4 - Mcal. Mcal/h; 5 - Gcal. Gcal/h	0		MO ^uint8	1		7	1
768	UC7	Unit of calorific value; Values: 0 - MJ/m3; 1 - kWh/m3; 2 - Btu/ft3; 3 - kcal/m3; 4 - Mcal/m3; 5 - Gcal/m3	0		MO ^uint8	1		7	1
769	UC8	Unit of density; Values: 0 - kg/m3	0		MO ^uint8	1		4	1
770	UC9	Unit of mass; Values: 0 - kg. kg/h; 1 - lb. lb/h	0		MO ^uint8	1		4	1
771	UC10	Unit of time; Values: 0 - months; 1 - days	0		MO ^uint8	1		4	1
772	ConfDI	Binary state of presence digital inputs 1-8. Bit=1 - specific input is available; Range: 0; 255	0		MO ^uint8			3	1

1	2	3	4	5	6	7	8	9	10
773	DION	Available digital inputs in current configuration; Range: 0; 255	0		O ^uint8				
774	DI	Binary state of activity on digital inputs 1-8. Bit=1 - specific input is active; Range: 0; 255	0		O ^uint8				
775	DIPol	Binary polarization of digital inputs 1-8. Bit=1 - active - short, Bit=0 - active - open; Range: 0; 255	0		MO ^uint8			3	1
776	DI1Desc	DI1, input description; Character string, length: 0; 14	0		MO ^string			3	
777	DI2Desc	DI2, input description; Character string, length: 0; 14	0		MO ^string			3	
778	DI3Desc	DI3, input description; Character string, length: 0; 14	0		MO ^string			3	
779	DI4Desc	DI4, input description; Character string, length: 0; 14	0		MO ^string			3	
780	DI5Desc	DI5, input description; Character string, length: 0; 14	0		MO ^string			3	
781	DI6Desc	DI6, input description; Character string, length: 0; 14	0		MO ^string			3	
782	DI7Desc	DI7, input description; Character string, length: 0; 14	0		MO ^string			3	
783	DI8Desc	DI8, input description; Character string, length: 0; 14	0		MO ^string			3	
784	DIErr	Overload of DIx	0		O ^uint8		LSu		
785	DI8Mode	Mode for DI8 input; Values: 0 - IN; 1 - SCR	0		MO ^uint8	1		7	1
786	DO	Binary status of DO1..4 outputs. Bit = 1 - the corresponding output is active; Range: 0; 15	0		O ^uint8				
787	DO1Mode	DO1, output mode of operation. Output status: S - short, O - open; Values: 0 - Off (O); 1 - Counter (S); 2 - Status (S); 3 - Time (S); 4 - On (S); 5 - Counter (O); 6 - Status (O); 7 - Time (O); 9 - Event (S); 10 - Event (O)	0		MO ^uint8			3	1
788	DO1Idx	DO1, output controlling counter; Values: 0 - Vb; 1 - Vm; 2 - Vm2; 3 - E; 5 - Vme; 6 - Vbe; 7 - Ee; 9 - VbT; 10 - ET	0		MO ^uint16			3	1
789	DO1Evt	DO1, output controlling event; Range: 0; 72	0		MO ^uint16			3	1
790	---	-	0		O ^uint8				
791	DO1PulseLen	DO1, output pulse length; Range: 25; 255	0	ms	MO ^uint8			3	1
792	DO1PulsePer	DO1, output pulse period; Range: 50; 255	0	ms	MO ^uint8			3	1
793	DO1Factor	DO1, output pulse weight; Range: 0; 1000	0	u/imp	MO ^float			3	1
794	DO1PulseBuff	DO1, output pulses buffer	0		O ^uint16				
795	DO1Pulses	DO1, output pulses counter	0		O ^uint32				
796	DO1Desc	DO1, description of output; Character string, length: 0; 14	0		MO ^string			3	1
797	DO2Mode	DO2, output mode of operation. Output status: S - short, O - open; Values: 0 - Off (O); 1 - Counter (S); 2 - Status (S); 3 - Time (S); 4 - On (S); 5 - Counter (O); 6 - Status (O); 7 - Time (O); 8 - Freq. output; 9 - Event (S); 10 - Event (O)	0		MO ^uint8			3	1
798	DO2Idx	DO2, output controlling counter; Values: 0 - Vb; 1 - Vm; 2 - Vm2; 3 - E; 5 - Vme; 6 - Vbe; 7 - Ee; 9 - VbT; 10 - ET	0		MO ^uint16			3	1
799	DO2Evt	DO2, output controlling event; Range: 0; 72	0		MO ^uint16			3	1
800	---	-	0		O ^uint8				
801	DO2PulseLen	DO2, output pulse length; Range: 25; 255	0	ms	MO ^uint8			3	1
802	DO2PulsePer	DO2, output pulse period; Range: 50; 255	0	ms	MO ^uint8			3	1
803	DO2Factor	DO2, output pulse weight; Range: 0; 1000	0	u/imp	MO ^float			3	1
804	DO2PulseBuff	DO2, output pulses buffer	0		O ^uint16				
805	DO2Pulses	DO2, output pulses counter	0		O ^uint32				
806	DO2Desc	DO2, description of output; Character string, length: 0; 14	0		MO ^string			3	1
807	DO2Fldx	DO2, output control parameter (frequency mode); Values: 56 - Qb; 57 - Qm; 58 - QE; 59 - QM; 89 - p1; 112 - p2; 131 - t; 92 - p1g; 107 - AtmPress; 129 - tamb	0		MO ^uint16			3	1
808	DO2FMin	DO2, MIN input value (frequency mode); Range: -1000; 5000000	0		MO ^float			3	1
809	DO2FMax	DO2, MAX input value (frequency mode); Range: -1000; 5000000	0		MO ^float			3	1
810	FOMin	DO2, MIN output value (frequency mode); Range: 1; 5000	0	Hz	MO ^uint32			3	1
811	FOMax	DO2, MAX output value (frequency mode); Range: 1; 5000	0	Hz	MO ^uint32			3	1
812	FOut	DO2, output frequency	0	Hz	O ^float		C		

1	2	3	4	5	6	7	8	9	10
813	DO3Mode	DO3, output mode of operation. Output status: S - short, O - open; Values: 0 - Off (O); 1 - Counter (S); 2 - Status (S); 3 - Time (S); 4 - On (S); 5 - Counter (O); 6 - Status (O); 7 - Time (O); 9 - Event (S); 10 - Event (O)	0		MO ^uint8			4	1
814	DO3Idx	DO3, output controlling counter; Values: 0 - Vb; 1 - Vm; 2 - Vm2; 3 - E; 5 - Vme; 6 - Vbe; 7 - Ee; 9 - VbT; 10 - ET	0		MO ^uint16			4	1
815	DO3Evt	DO3, output controlling event; Range: 0; 72	0		MO ^uint16			4	1
816	---	-	0		O ^uint8				
817	DO3PulseLen	DO3, output pulse length; Range: 25; 255	0	ms	MO ^uint8			4	1
818	DO3PulsePer	DO3, output pulse period; Range: 50; 255	0	ms	MO ^uint8			4	1
819	DO3Factor	DO3, output pulse weight; Range: 0; 1000	0	u/imp	MO ^float			4	1
820	DO3PulseBuff	DO3, output pulses buffer	0		O ^uint16				
821	DO3Pulses	DO3, output pulses counter	0		O ^uint32				
822	DO3Desc	DO3, description of output; Character string, length: 0; 14	0		MO ^string			4	1
823	DO4Mode	DO4, output mode of operation. Output status: S - short, O - open; Values: 0 - Off (O); 1 - Counter (S); 2 - Status (S); 3 - Time (S); 4 - On (S); 5 - Counter (O); 6 - Status (O); 7 - Time (O); 9 - Event (S); 10 - Event (O)	0		MO ^uint8			4	1
824	DO4Idx	DO4, output controlling counter; Values: 0 - Vb; 1 - Vm; 2 - Vm2; 3 - E; 5 - Vme; 6 - Vbe; 7 - Ee; 9 - VbT; 10 - ET	0		MO ^uint16			4	1
825	DO4Evt	DO4, output controlling event; Range: 0; 72	0		MO ^uint16			4	1
826	---	-	0		O ^uint8				
827	DO4PulseLen	DO4, output pulse length; Range: 25; 255	0	ms	MO ^uint8			4	1
828	DO4PulsePer	DO4, output pulse period; Range: 50; 255	0	ms	MO ^uint8			4	1
829	DO4Factor	DO4, output pulse weight; Range: 0; 1000	0	u/imp	MO ^float			4	1
830	DO4PulseBuff	DO4, output pulses buffer	0		O ^uint16				
831	DO4Pulses	DO4, output pulses counter	0		O ^uint32				
832	DO4Desc	DO4, description of output; Character string, length: 0; 14	0		MO ^string			4	1
833	DOEvtTm	DO1..4, time of output change in the event control mode; Range: 100; 5000	0	ms	MO ^uint16			3	1
834	DOBuffMax	DO1..4, output pulses buffer capacity; Range: 0; 1000	0		MO ^float			3	1
835	AccelX	Accelerometer data - X axis	0		O ^float		Av		
836	AccelY	Accelerometer data - Y axis	0		O ^float		Av		
837	AccelZ	Accelerometer data - Z axis	0		O ^float		Av		
838	LcdBoard	Display board type; Values: 0 - 6K; 1 - 6K_Fx; 2 - 6K_12K; 3 - UpDown	0		MO ^uint8	1		7	1
839	LcdContrast	Contrast of display; Range: 0; 63	0		MO ^uint32			3	
840	LcdTm	Automatic display off; Range: 10; 28800	0	s	MO ^uint16			4	1
841	LcdBLightTm	Display backlight timeout; Range: 10; 28800	0	s	MO ^uint16			3	
842	LcdBLightLvl	Display backlight brightness; Range: 0; 30	0		MO ^uint8			3	
843	LcdMode	LCD operation mode with ext. power supply; Values: 0 - LcdTm; 1 - ConstOn	0		MO ^uint8			4	1
844	Cycle	Algorithm cycle number	0		O ^uint32				
845	DevName	Name of the device	0		O ^string				
846	MFR	Manufacturer of the device	0		O ^string				
847	DevSN	Serial number of the device; Range: 1000000000; 4000000000	0		MO ^uint32	1		9	1
848	FlowmeterSN	Flow meter serial number; Character string, length: 0; 14	0		MO ^string	1		4	1
849	GasMarket	The gas market configuration; Range: 0; 1	0		MO ^uint8	1		7	1
850	ConfEnergy	Configuration of energy parameter names (exact or estimated energy); Range: 0; 1	0		MO ^uint8	1		7	1
851	MID	Device - indicator of potential compliance with MID	0		O ^uint8				
852	MIDOn	Program - declaration of potential compliance with MID; Range: 0; 1	0		MO ^uint8	1		7	1
853	SV	Software identifier	0		O ^string				

1	2	3	4	5	6	7	8	9	10
854	HV	Hardware version	0		O ^string				
855	DPV	Number of DP table	0		O ^string				
856	ZDV	Number of ZD table	0		O ^string				
857	Desc1	Auxiliary descriptive parameter 1; Character string, length: 0; 14	0		MO ^string			4	
858	Desc2	Auxiliary descriptive parameter 2; Character string, length: 0; 14	0		MO ^string			4	
859	Desc3	Auxiliary descriptive parameter 3; Character string, length: 0; 14	0		MO ^string			4	
860	Site	Device location; Character string, length: 1; 14	0		MO ^string			4	
861	Comp	Date and time of compilation	0		O ^string				
862	CrcTest	CrcMain test; Values: 0.000000	0		MO ^uint8			3	
863	CrcMain	Main checksum	0		O ^uint32				
864	CrcBoot	CRC_BOOT	0		O ^uint32				
865	VerDs4	Version, EXT resources	0		O ^uint32				
866	VerDs5	Version, menu map	0		O ^uint32				
867	VerDs6	Version, modbus map	0		O ^uint32				
868	VerDs7	Version, user data map	0		O ^uint32				
869	VerDs11	Version, modem configuration	0		O ^uint32				
870	VerDs15	Version, alarm map	0		O ^uint32				
871	VerDs16	Version, map of default settings	0		O ^uint32				
872	VerDs17	Version, master mode map	0		O ^uint32				
873	VerDs20	Version, BASE resources	0		O ^uint32				
874	ENId	Frame B of the encoder	0		O ^string				
875	ENSt	Encoder status	0		O ^uint16				
876	ENBatPer	The period of reading the encoder in BATT mode; Range: 1; 15	0	min	MO ^uint8			4	1
877	UpProgress	Software upgrade progress; Range: 0; 0	0	%	MO ^float			4	
878	NewSW	Software update available	0		O ^string				
879	MMode	Mode of modem operation (Online needs Full mode of ext. pwr supply); Values: 0 - Off; 1 - Mix(OL+Sched.); 2 - Schedules; 3 - OnLine	0		MO ^uint8			4	1
880	MPin	SIM PIN number; Digit sequence, length: 0; 8	0		MO ^string			4	1
881	MPinCount	Number of remaining attempts to enter SIM card PIN number	0		O ^uint8				
882	MModel	Modem model	0		O ^string				
883	MModelD	Modem model (details)	0		O ^string				
884	MImei	IMEI	0		O ^string				
885	Mlccid	SIM card identification number	0		O ^string				
886	MOperatorMode	Operator selection mode; Range: 0; 2	0		MO ^uint16			4	1
887	MOperatorCode	The selected operator's code; Range: 0; 4294967295	0		MO ^uint32			4	1
888	MOperator	Mobile network operator	0		O ^string				
889	MConfRat	Configuration of modem work technology; Values: 0 - Auto; 2 - 2G; 3 - 3G; 4 - 4G	0		MO ^uint8			4	1
890	MRat	Current modem technology	0		O ^string				
891	MFreqBand	Modem bandwidth	0		O ^uint16				
892	MCsq	Network signal level from current/last session	0		O ^int8				
893	MApn1	APN1, name; Character string, length: 0; 64	0		MO ^string			4	1
894	MApnUser1	APN1, user; Character string, length: 0; 24	0		MO ^string			4	1
895	MApnPwd1	APN1, password; Character string, length: 0; 24	0		MO ^string			4	1
896	Mlp1	APN1, IP address in the current/last modem session	0		O ^string				
897	MApn2	APN2, name; Character string, length: 0; 64	0		MO ^string			4	1
898	MApnUser2	APN2, user; Character string, length: 0; 24	0		MO ^string			4	1

1	2	3	4	5	6	7	8	9	10
899	MApnPwd2	APN2, password; Character string, length: 0; 24	0		MO ^string			4	1
900	Mlp2	APN2, IP address in the current/last modem session	0		O ^string				
901	MState	Modem status	0		O ^string				
902	MTask	Currently performed task	0		O ^string				
903	MTaskState	Status of the currently performed task	0		O ^string				
904	MErrTask	The task in which an error occurred during execution	0		O ^string				
905	MErrTaskState	The status of the task in which an error occurred during execution	0		O ^string				
906	MErrTaskMsg	Error message	0		O ^string				
907	MBattTm	Maintaining the Online mode after the failure of external power supply; Range: 0; 1440	0	min	MO ^uint16			4	1
908	MPort	Port number; Range: 0; 65535	0		MO ^uint16			4	1
909	MOApnSrc	APN selection for permanent Online mode; Values: 1 - APN1; 2 - APN2	0		MO ^uint8			4	1
910	MAdr	Transmission address (modem); Range: 1; 65534	0		MO ^uint16			4	1
911	MConnTm	Time to automatically turn off the session; Range: 0; 65535	0	s	MO ^uint16			4	1
912	MFtpDefLog	Default login to the FTP server; Character string, length: 0; 24	0		MO ^string			4	1
913	MFtpDefPwd	Default password to the FTP server; Character string, length: 0; 24	0		MO ^string			4	1
914	MFtpProdSF	Service FTP support folder; Character string, length: 0; 24	0		MO ^string			7	1
915	MlpFlt1	Filter of permissible IP address; Character string, length: 0; 15	0		MO ^string			4	1
916	MlpFlt2	Filter of permissible IP address; Character string, length: 0; 15	0		MO ^string			4	1
917	MlpFlt3	Filter of permissible IP address; Character string, length: 0; 15	0		MO ^string			4	1
918	MRRunTout	Maximum modem working time (applies to schedule and autotest); Range: 0; 120	0	min	MO ^uint8			4	1
919	MCmd	Force modem session; Range: 0; 9	0		MO ^uint8			4	
920	MAction	Current modem session (1..9 - schedule), 10 - basic test, 11 - extended test, 100 - Online mode, 0 - modem disabled	0		O ^uint8				
921	MSessSt	Action status from current/last session	0		O ^uint32				
922	MSessErr	Error status from current/last session	0		O ^uint32				
923	MSessStLast	Action status from current/last autotest	0		O ^uint32				
924	MSessErrLast	Error status from current/last autotest	0		O ^uint32				
925	MCgi	CGI	0		O ^string				
926	MCellId	Network cell ID	0		O ^uint16				
927	MONtm	Total on-time of modem	0	min	O ^uint32				
928	MTcpConTm	Total TCP connection time (Client/Server)	0	min	O ^uint32				
929	MRcv	Data received (counter)	0	B	O ^uint64				
930	MSnt	Data sent (counter)	0	B	O ^uint64				
931	MFtpConTm	Total duration of the connection to the FTP server	0	min	O ^uint32				
932	MFtpData	Sum of uploaded and received bytes from FTP server	0	B	O ^uint64				
933	MNtpCon	Counter of successful connections to NTP server	0		O ^uint16				
934	MFtpCon	Counter of successful connections to FTP server	0		O ^uint16				
935	MNoSim	Counter of detection missing SIM card	0		O ^uint16				
936	MNoLogGsm	Counter of the lack of logging on to a GSM	0		O ^uint16				
937	MLowLvlCsq	Counter of network low level (CSQ less than 9)	0		O ^uint16				
938	MNoLogApn	Counter of errors logging to APN	0		O ^uint16				
939	MNoTcp	Counter of the lack TCP connection	0		O ^uint16				
940	MTcpCon	Counter of correct TCP connections	0		O ^uint16				
941	MTcpDiscon	Counter of disconnections from TCP server	0		O ^uint16				
942	MNoFtp	Counter of the lack of connection with FTP server	0		O ^uint16				
943	MNoNtp	Counter of the lack of connection with NTP server	0		O ^uint16				



1	2	3	4	5	6	7	8	9	10
944	MTurnOn	Counter of modem startups	0		O ^uint16				
945	MTout	Counter of modem closings after time MRunTout	0		O ^uint16				
946	MLink	Transmission activity of modem	0		O ^uint8				
947	MlpPing	Ping test IP address; Character string, length: 0; 15	0		MO ^string			4	
948	MPingTm	Ping test period; Range: 0; 10000	0	min	MO ^uint16			4	
949	MShEn	Permission to perform individual schedules. Bit = 1 - schedule enabled, Bit = 0 - schedule disabled; Range: 0; 511	0		MO ^uint16			4	1
950	MSh1	Description of schedule 1	0		O ^string				
951	MSh2	Description of schedule 2	0		O ^string				
952	MSh3	Description of schedule 3	0		O ^string				
953	MSh4	Description of schedule 4	0		O ^string				
954	MSh5	Description of schedule 5	0		O ^string				
955	MSh6	Description of schedule 6	0		O ^string				
956	MSh7	Description of schedule 7	0		O ^string				
957	MSh8	Description of schedule 8	0		O ^string				
958	MSh9	Description of schedule 9	0		O ^string				
959	MSh1Desc	Name of schedule 1	0		O ^string				
960	MSh2Desc	Name of schedule 2	0		O ^string				
961	MSh3Desc	Name of schedule 3	0		O ^string				
962	MSh4Desc	Name of schedule 4	0		O ^string				
963	MSh5Desc	Name of schedule 5	0		O ^string				
964	MSh6Desc	Name of schedule 6	0		O ^string				
965	MSh7Desc	Name of schedule 7	0		O ^string				
966	MSh8Desc	Name of schedule 8	0		O ^string				
967	MSh9Desc	Name of schedule 9	0		O ^string				
968	---	-	0		O ^int32				
969	Param1Idx	Parameter 1 index; Range: -1; 1239	0		MO ^int16			3	
970	Param1LMin	Lower limit of Parameter 1; Range: -9000000000; 9000000000	0		MO ^float			3	
971	Param1LMax	Upper limit of Parameter 1; Range: -9000000000; 9000000000	0		MO ^float			3	
972	Param1LTm	Delay time of notification of exceeding the limit of Parameter 1; Range: 0; 3600	0	s	MO ^uint16			3	
973	Param1Val	Parameter 1 value	0		O ^double				
974	Param2Idx	Parameter 2 index; Range: -1; 1239	0		MO ^int16			3	
975	Param2LMin	Lower limit of Parameter 2; Range: -9000000000; 9000000000	0		MO ^float			3	
976	Param2LMax	Upper limit of Parameter 2; Range: -9000000000; 9000000000	0		MO ^float			3	
977	Param2LTm	Delay time of notification of exceeding the limit of Parameter 2; Range: 0; 3600	0	s	MO ^uint16			3	
978	Param2Val	Parameter 2 value	0		O ^double				
979	Param3Idx	Parameter 3 index; Range: -1; 1239	0		MO ^int16			3	
980	Param3LMin	Lower limit of Parameter 3; Range: -9000000000; 9000000000	0		MO ^float			3	
981	Param3LMax	Upper limit of Parameter 3; Range: -9000000000; 9000000000	0		MO ^float			3	
982	Param3LTm	Delay time of notification of exceeding the limit of Parameter 3; Range: 0; 3600	0	s	MO ^uint16			3	
983	Param3Val	Parameter 3 value	0		O ^double				
984	Param4Idx	Parameter 4 index; Range: -1; 1239	0		MO ^int16			3	
985	Param4LMin	Lower limit of Parameter 4; Range: -9000000000; 9000000000	0		MO ^float			3	
986	Param4LMax	Upper limit of Parameter 4; Range: -9000000000; 9000000000	0		MO ^float			3	
987	Param4LTm	Delay time of notification of exceeding the limit of Parameter 4; Range: 0; 3600	0	s	MO ^uint16			3	
988	Param4Val	Parameter 4 value	0		O ^double				

1	2	3	4	5	6	7	8	9	10
989	GasMetLoad1	Range 1 of flowmeter load	0	%	O ^float				
990	GasMetLoad2	Range 2 of flowmeter load	0	%	O ^float				
991	GasMetLoad3	Range 3 of flowmeter load	0	%	O ^float				
992	GasMetLoad4	Range 4 of flowmeter load	0	%	O ^float				
993	ConfExtReading	Configuration of external readings (MASTER mode), 0-off, 1-gas chromatograph, 2-universal; Range: 0; 2	0		MO ^uint8	1		4	1
994	EmEnable	MASTER mode, configuration; Range: 0; 65535	0		MO ^uint16			4	1
995	EmActive	MASTER mode, active step; Range: 0; 65535	0		O ^uint32				
996	EmErr	MASTER mode, error; Range: 0; 65535	0		O ^uint16				
997	Em1Desc	MASTER mode, description of param. 1	0		O ^string				
998	Em2Desc	MASTER mode, description of param. 2	0		O ^string				
999	Em3Desc	MASTER mode, description of param. 3	0		O ^string				
1000	Em4Desc	MASTER mode, description of param. 4	0		O ^string				
1001	Em5Desc	MASTER mode, description of param. 5	0		O ^string				
1002	Em6Desc	MASTER mode, description of param. 6	0		O ^string				
1003	Em7Desc	MASTER mode, description of param. 7	0		O ^string				
1004	Em8Desc	MASTER mode, description of param. 8	0		O ^string				
1005	Em9Desc	MASTER mode, description of param. 9	0		O ^string				
1006	Em10Desc	MASTER mode, description of param. 10	0		O ^string				
1007	Em11Desc	MASTER mode, description of param. 11	0		O ^string				
1008	Em12Desc	MASTER mode, description of param. 12	0		O ^string				
1009	Em13Desc	MASTER mode, description of param. 13	0		O ^string				
1010	Em14Desc	MASTER mode, description of param. 14	0		O ^string				
1011	Em15Desc	MASTER mode, description of param. 15	0		O ^string				
1012	Em16Desc	MASTER mode, description of param. 16	0		O ^string				
1013	Em1Val	MASTER mode, value of param. 1	0		O ^double				
1014	Em2Val	MASTER mode, value of param. 2	0		O ^double				
1015	Em3Val	MASTER mode, value of param. 3	0		O ^double				
1016	Em4Val	MASTER mode, value of param. 4	0		O ^double				
1017	Em5Val	MASTER mode, value of param. 5	0		O ^double				
1018	Em6Val	MASTER mode, value of param. 6	0		O ^double				
1019	Em7Val	MASTER mode, value of param. 7	0		O ^double				
1020	Em8Val	MASTER mode, value of param. 8	0		O ^double				
1021	Em9Val	MASTER mode, value of param. 9	0		O ^double				
1022	Em10Val	MASTER mode, value of param. 10	0		O ^double				
1023	Em11Val	MASTER mode, value of param. 11	0		O ^double				
1024	Em12Val	MASTER mode, value of param. 12	0		O ^double				
1025	Em13Val	MASTER mode, value of param. 13	0		O ^double				
1026	Em14Val	MASTER mode, value of param. 14	0		O ^double				
1027	Em15Val	MASTER mode, value of param. 15	0		O ^double				
1028	Em16Val	MASTER mode, value of param. 16	0		O ^double				
1029	ExtAL1_00_Evt	Configuration of events for bits 0..7 of ExtAL1 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1030	ExtAL1_08_Evt	Configuration of events for bits 8..15 of ExtAL1 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1031	ExtAL1_16_Evt	Configuration of events for bits 16..23 of ExtAL1 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1032	ExtAL1_24_Evt	Configuration of events for bits 24..31 of ExtAL1 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1033	ExtAL1Pol	Bit polarization 0..31 of ExtAL1 param.; Range: 0; 4294967295	0		MO ^uint32			4	1

1	2	3	4	5	6	7	8	9	10
1034	ExtAL1	Binary state of ExtAL1	0		O ^uint32		LSu		
1035	ExtAL1St	Status of ExtAL1	0		O ^bool				
1036	ExtAL2_00_Evt	Configuration of events for bits 0..7 of ExtAL2 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1037	ExtAL2_08_Evt	Configuration of events for bits 8..15 of ExtAL2 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1038	ExtAL2_16_Evt	Configuration of events for bits 16..23 of ExtAL2 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1039	ExtAL2_24_Evt	Configuration of events for bits 24..31 of ExtAL2 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1040	ExtAL2Pol	Bit polarization 0..31 of ExtAL2 param.; Range: 0; 4294967295	0		MO ^uint32			4	1
1041	ExtAL2	Binary state of ExtAL2	0		O ^uint32		LSu		
1042	ExtAL2St	Status of ExtAL2	0		O ^bool				
1043	ExtAL3_Evt	Configuration of events for bits 0..7 of ExtAL3 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1044	ExtAL3Pol	Bit polarization 0..7 of ExtAL3 param.; Range: 0; 255	0		MO ^uint8			4	1
1045	ExtAL3	Binary state of ExtAL3	0		O ^uint8		LSu		
1046	ExtAL3St	Status of ExtAL3	0		O ^bool				
1047	ExtAL4_Evt	Configuration of events for bits 0..7 of ExtAL4 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1048	ExtAL4Pol	Bit polarization 0..7 of ExtAL4 param.; Range: 0; 255	0		MO ^uint8			4	1
1049	ExtAL4	Binary state of ExtAL4	0		O ^uint8		LSu		
1050	ExtAL4St	Status of ExtAL4	0		O ^bool				
1051	ExtAL5_Evt	Configuration of events for bits 0..7 of ExtAL5 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1052	ExtAL5Pol	Bit polarization 0..7 of ExtAL5 param.; Range: 0; 255	0		MO ^uint8			4	1
1053	ExtAL5	Binary state of ExtAL5	0		O ^uint8		LSu		
1054	ExtAL5St	Status of ExtAL5	0		O ^bool				
1055	ExtAL6_Evt	Configuration of events for bits 0..7 of ExtAL6 param.; Range: 0; 18446744073709551615	0		MO ^uint64			4	1
1056	ExtAL6Pol	Bit polarization 0..7 of ExtAL6 param.; Range: 0; 255	0		MO ^uint8			4	1
1057	ExtAL6	Binary state of ExtAL6	0		O ^uint8		LSu		
1058	ExtAL6St	Status of ExtAL6	0		O ^bool				
1059	AO1ParamIdx	AO1, output control parameter; Range: -1; 1239	0		MO ^int16			3	1
1060	AO1InMin	AO1, MIN input value; Range: -1000; 5000000	0		MO ^float			3	1
1061	AO1InMax	AO1, MAX input value; Range: -1000; 5000000	0		MO ^float			3	1
1062	AO1OutMin	AO1, MIN output value; Range: 0; 1000	0		MO ^float			3	1
1063	AO1OutMax	AO1, MAX output value; Range: 0; 1000	0		MO ^float			3	1
1064	AO1Out	AO1, output value	0		O ^float		C		
1065	AO2ParamIdx	AO2, output control parameter; Range: -1; 1239	0		MO ^int16			3	1
1066	AO2InMin	AO2, MIN input value; Range: -1000; 5000000	0		MO ^float			3	1
1067	AO2InMax	AO2, MAX input value; Range: -1000; 5000000	0		MO ^float			3	1
1068	AO2OutMin	AO2, MIN output value; Range: 0; 1000	0		MO ^float			3	1
1069	AO2OutMax	AO2, MAX output value; Range: 0; 1000	0		MO ^float			3	1
1070	AO2Out	AO2, output value	0		O ^float		C		
1071	EDI_1-8Src	EDI1_8, source of external signaling inputs; Range: 0; 16	0		MO ^uint8			3	1
1072	EDI_1-8	EDI1_8, binary state of the external signaling inputs in group 1-8. Bit = 1 - the corresponding input is active; Range: 0; 255	0		O ^uint8				
1073	EDI_1-8Pol	EDI1_8, polarization of external signaling inputs 1-8. Bit = 1 - active - closed, Bit = 0 - active - open; Range: 0; 255	0		MO ^uint8			3	1
1074	EDI1Desc	EDI1_8, description of the external input 1; Character string, length: 0; 14	0		MO ^string			3	
1075	EDI2Desc	EDI1_8, description of the external input 2; Character string, length: 0; 14	0		MO ^string			3	

1	2	3	4	5	6	7	8	9	10
1076	EDI3Desc	EDI1_8, description of the external input 3; Character string, length: 0; 14	0		MO ^string			3	
1077	EDI4Desc	EDI1_8, description of the external input 4; Character string, length: 0; 14	0		MO ^string			3	
1078	EDI5Desc	EDI1_8, description of the external input 5; Character string, length: 0; 14	0		MO ^string			3	
1079	EDI6Desc	EDI1_8, description of the external input 6; Character string, length: 0; 14	0		MO ^string			3	
1080	EDI7Desc	EDI1_8, description of the external input 7; Character string, length: 0; 14	0		MO ^string			3	
1081	EDI8Desc	EDI1_8, description of the external input 8; Character string, length: 0; 14	0		MO ^string			3	
1082	EDI_9-16Src	EDI9_16, source of external signaling inputs; Range: 0; 16	0		MO ^uint8			3	1
1083	EDI_9-16	EDI9_16, binary state of the external signaling inputs in group 9-16. Bit = 1 - the corresponding input is active; Range: 0; 255	0		O ^uint8				
1084	EDI_9-16Pol	EDI9_16, polarization of external signaling inputs 9-16. Bit = 1 - active - closed, Bit = 0 - active - open; Range: 0; 255	0		MO ^uint8			3	1
1085	EDI9Desc	EDI9_16, description of the external input 9; Character string, length: 0; 14	0		MO ^string			3	
1086	EDI10Desc	EDI9_16, description of the external input 10; Character string, length: 0; 14	0		MO ^string			3	
1087	EDI11Desc	EDI9_16, description of the external input 11; Character string, length: 0; 14	0		MO ^string			3	
1088	EDI12Desc	EDI9_16, description of the external input 12; Character string, length: 0; 14	0		MO ^string			3	
1089	EDI13Desc	EDI9_16, description of the external input 13; Character string, length: 0; 14	0		MO ^string			3	
1090	EDI14Desc	EDI9_16, description of the external input 14; Character string, length: 0; 14	0		MO ^string			3	
1091	EDI15Desc	EDI9_16, description of the external input 15; Character string, length: 0; 14	0		MO ^string			3	
1092	EDI16Desc	EDI9_16, description of the external input 16; Character string, length: 0; 14	0		MO ^string			3	
1093	GasSrc	Origin of gas parameters, 0-user programming, 1-automatic download	0		O ^uint8				
1094	ExtGasAlarm	Acceptable delay time for programming a new gas composition; Range: 0; 86400	0	s	MO ^uint32	1		4	1
1095	ExtGasDly	Chromatograph (gas parameters reading period); Range: 0; 86400	0	s	MO ^uint32	1		4	1
1096	ExtGasAdr	Chromatograph (address in the modbus protocol); Range: 1; 255	0		MO ^uint8	1		4	1
1097	ExtGasTrig	Control parameter for automatic gas parameters download; Range: 0; 65535	0		MO ^uint16	1		4	1
1098	ExtGasId	Configuration identifier for automatic gas parameter download	0		O ^uint16				
1099	ExtGasStmNo	Chromatograph (selected stream no.); Range: -1; 127	0		MO ^int8			4	1
1100	ExtGasStmReg	Stream no. in the chromatograph (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1101	ExtGasStmType	Stream no. in the chromatograph (parameter type: 5-uint16, 6-uint32, 7-float); Values: 5 - Uint16; 6 - Uint32; 7 - Float	0		MO ^uint8			4	1
1102	ExtXH2Reg	ProgXH2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1103	ExtXCO2Reg	ProgXCO2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1104	ExtXN2Reg	ProgXN2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1105	ExtHsReg	ProgHs (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1106	ExtDReg	Progd (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1107	ExtC1Reg	C1 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1108	ExtC2Reg	C2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1109	ExtC3Reg	C3 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1110	ExtnC4Reg	nC4 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1111	ExtiC4Reg	iC4 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1112	ExtnC5Reg	nC5 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1113	ExtiC5Reg	iC5 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1114	ExtneoC5Reg	neoC5 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1

1	2	3	4	5	6	7	8	9	10
1115	ExtC6+Reg	C6+ (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1116	ExtN2Reg	N2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1117	ExtCO2Reg	CO2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1118	ExtC6H14Reg	C6H14 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1119	ExtC7H16Reg	C7H16 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1120	ExtC8H18Reg	C8H18 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1121	ExtC9H20Reg	C9H20 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1122	ExtC10H22Reg	C10H22 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1123	ExtH2Reg	H2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1124	ExtH2OReg	H2O (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1125	ExtH2SReg	H2S (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1126	ExtCOReg	CO (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1127	ExtHeReg	He (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1128	ExtArReg	Ar (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1129	ExtO2Reg	O2 (modbus register no.); Range: 0; 65535	0		MO ^uint16			4	1
1130	p1TypeReg	Pressure source p1 (for recording type D); Values: 0 - p1g; 1 - p1abs; 2 - p1	0		MO ^uint8			4	1
1131	Fp	Pressure factor Fp	0		O ^float		Av		
1132	Ft	Temperature factor Ft	0		O ^float		Av		
1133	Fpv	Compressibility Fpv	0		O ^float		Av		
1134	Fpv2	Compressibility Fpv2	0		O ^float		Av		
1135	Latitude	Latitude; Range: -90; 90	0		MO ^double			4	
1136	Longitude	Longitude; Range: -180; 180	0		MO ^double			4	
1137	AuxFp1	Auxiliary parameter	0		MO ^double			4	
1138	AuxFp2	Auxiliary parameter	0		MO ^double			4	
1139	AuxFp3	Auxiliary parameter	0		MO ^double			4	
1140	AuxFp4	Auxiliary parameter	0		MO ^double			4	
1141	AuxInt1	Auxiliary parameter	0		MO ^uint64			4	
1142	AuxInt2	Auxiliary parameter	0		MO ^uint64			4	
1143	AuxInt3	Auxiliary parameter	0		MO ^uint64			4	
1144	AuxInt4	Auxiliary parameter	0		MO ^uint64			4	
1145	CrcConf	CRC, device configuration	0		O ^uint32				
1146	CrcUpdate	CRC, update	0		O ^uint32				
1147	p1m	Pressure p1 (momentary)	0	kPa	O ^float		C		
1148	p2m	Pressure p2 (momentary)	0	kPa	O ^float		C		
1149	tm	Temperature t (momentary)	0	°C	O ^float		C		
1150	p1MinTm	Time of MIN value occurrence (during the data analysis period)	0		O ^uint32				
1151	p1MaxTm	Time of MAX value occurrence (during the data analysis period)	0		O ^uint32				
1152	tMinTm	Time of MIN value occurrence (during the data analysis period)	0		O ^uint32				
1153	tMaxTm	Time of MAX value occurrence (during the data analysis period)	0		O ^uint32				
1154	QmMinTm	Time of MIN value occurrence (during the data analysis period)	0		O ^uint32				
1155	QmMaxTm	Time of MAX value occurrence (during the data analysis period)	0		O ^uint32				
1156	QbMinTm	Time of MIN value occurrence (during the data analysis period)	0		O ^uint32				
1157	QbMaxTm	Time of MAX value occurrence (during the data analysis period)	0		O ^uint32				
1158	MApnAuth1	APN1, authentication mode; Values: 0 - None; 1 - PAP; 2 - CHAP	0		MO ^uint8			4	1
1159	MApnAuth2	APN2, authentication mode; Values: 0 - None; 1 - PAP; 2 - CHAP	0		MO ^uint8			4	1

1	2	3	4	5	6	7	8	9	10
1160	MResTm	Time of additional modem reset; Range: -1; 1439	0	min	MO ^uint16			4	1
1161	MldxSh	Schedule no. to rollback the reporting time; Range: 1; 9	0		MO ^uint8			4	
1162	MldxReg	Registration type number to rollback the reporting time; Range: 0; 11	0		MO ^uint8			4	
1163	MldxVal	Indication of the latest record for reporting. Setting the value - rolling back the reporting by the indicated number of samples; Range: 0; 4294967295	0		MO ^uint32			4	
1164	EnrMaxRec1	MB enron, maximum records register (arch 1)	0		O ^uint16				
1165	EnrMaxRec2	MB enron, maximum records register (arch 2)	0		O ^uint16				
1166	EnrMaxRec3	MB enron, maximum records register (arch 3)	0		O ^uint16				
1167	EnrMaxRec4	MB enron, maximum records register (arch 4)	0		O ^uint16				
1168	EnrMaxRec5	MB enron, maximum records register (arch 5)	0		O ^uint16				
1169	EnrMaxRec6	MB enron, maximum records register (arch 6)	0		O ^uint16				
1170	EnrMaxRec7	MB enron, maximum records register (arch 7)	0		O ^uint16				
1171	EnrMaxRec8	MB enron, maximum records register (arch 8)	0		O ^uint16				
1172	EnrMaxRec9	MB enron, maximum records register (arch 9)	0		O ^uint16				
1173	EnrMaxRec10	MB enron, maximum records register (arch 10)	0		O ^uint16				
1174	EnrCurRec1	MB enron, current record pointer (arch 1)	0		O ^uint16				
1175	EnrCurRec2	MB enron, current record pointer (arch 2)	0		O ^uint16				
1176	EnrCurRec3	MB enron, current record pointer (arch 3)	0		O ^uint16				
1177	EnrCurRec4	MB enron, current record pointer (arch 4)	0		O ^uint16				
1178	EnrCurRec5	MB enron, current record pointer (arch 5)	0		O ^uint16				
1179	EnrCurRec6	MB enron, current record pointer (arch 6)	0		O ^uint16				
1180	EnrCurRec7	MB enron, current record pointer (arch 7)	0		O ^uint16				
1181	EnrCurRec8	MB enron, current record pointer (arch 8)	0		O ^uint16				
1182	EnrCurRec9	MB enron, current record pointer (arch 9)	0		O ^uint16				
1183	EnrCurRec10	MB enron, current record pointer (arch 10)	0		O ^uint16				
1184	EnrReqRec1	MB enron, requested record pointer (arch 1); Range: 1; 65535	1		MO ^uint16			1	
1185	EnrReqRec2	MB enron, requested record pointer (arch 2); Range: 1; 65535	1		MO ^uint16			1	
1186	EnrReqRec3	MB enron, requested record pointer (arch 3); Range: 1; 65535	1		MO ^uint16			1	
1187	EnrReqRec4	MB enron, requested record pointer (arch 4); Range: 1; 65535	1		MO ^uint16			1	
1188	EnrReqRec5	MB enron, requested record pointer (arch 5); Range: 1; 65535	1		MO ^uint16			1	
1189	EnrReqRec6	MB enron, requested record pointer (arch 6); Range: 1; 65535	1		MO ^uint16			1	
1190	EnrReqRec7	MB enron, requested record pointer (arch 7); Range: 1; 65535	1		MO ^uint16			1	
1191	EnrReqRec8	MB enron, requested record pointer (arch 8); Range: 1; 65535	1		MO ^uint16			1	
1192	EnrReqRec9	MB enron, requested record pointer (arch 9); Range: 1; 65535	1		MO ^uint16			1	
1193	EnrReqRec10	MB enron, requested record pointer (arch 10); Range: 1; 65535	1		MO ^uint16			1	
1194	EnrNoRec1	MB enron, base register (arch 1)	0		O ^uint16				
1195	EnrNoRec2	MB enron, base register (arch 2)	0		O ^uint16				
1196	EnrNoRec3	MB enron, base register (arch 3)	0		O ^uint16				
1197	EnrNoRec4	MB enron, base register (arch 4)	0		O ^uint16				
1198	EnrNoRec5	MB enron, base register (arch 5)	0		O ^uint16				
1199	EnrNoRec6	MB enron, base register (arch 6)	0		O ^uint16				
1200	EnrNoRec7	MB enron, base register (arch 7)	0		O ^uint16				
1201	EnrNoRec8	MB enron, base register (arch 8)	0		O ^uint16				
1202	EnrNoRec9	MB enron, base register (arch 9)	0		O ^uint16				
1203	EnrNoRec10	MB enron, base register (arch 10)	0		O ^uint16				
1204	RGCEn	RGC protocol switch; Range: 0; 1	0		MO ^uint8			4	1

1	2	3	4	5	6	7	8	9	10
1205	RGCDVme	Service parameter	0		O ^float				
1206	RGCDVbe	Service parameter	0		O ^float				
1207	RGCDYe	Service parameter	0		O ^float				
1208	RGCDExt	Service parameter	0		O ^float				
1209	RGCRep	Service parameter	0		O ^uint16				
1210	RGCTm	Service parameter	0		O ^uint32				
1211	RGCTmBeg	Service parameter	0		O ^uint32				
1212	RGCTmEnd	Service parameter	0		O ^uint32				
1213	VmD	Volume counter at measurement conditions, undisturbed	0	m3	O ^double		C		
1214	XH2ExtOn	A switch for using increased shares of hydrogen in the AGA8-92DC algorithm; Values: 0 - Off; 1 - On	0		MO ^bool	1		7	
1215	XH2ExtMax	Allowable amount of hydrogen in the AGA8-92DC and SGERG-mod-H2 algorithms; Range: 10; 100	0	%	MO ^float	1		7	
1216	BattReplace	Data recording before starting the battery replacement procedure; Range: 1; 1	0		MO ^uint8	1		4	
1217	Vb2	Volume counter at base conditions, undisturbed (stream 2); Range: 0; 1000000000	0	m3	MO ^double	1	C	7	
1218	E2	Energy counter, undisturbed (stream 2); Range: 0; 1000000000	0	kWh	MO ^double	1	C	7	
1219	Vm2e	Volume counter at measurement conditions, disturbed (stream 2); Range: 0; 100000000	0	m3	MO ^double	1	C	4	
1220	Vb2e	Volume counter at base conditions, disturbed (stream 2); Range: 0; 1000000000	0	m3	MO ^double	1	C	7	
1221	E2e	Energy counter, disturbed (stream 2); Range: 0; 1000000000	0	kWh	MO ^double	1	C	7	
1222	Vm2D	Volume counter at measurement conditions, undisturbed (stream 2)	0	m3	O ^double		C		
1223	Vb2T	Volume counter at base conditions, total (stream 2)	0	m3	O ^double		C		
1224	E2T	Energy counter, total (stream 2)	0	kWh	O ^double		C		
1225	dVb2	Increment of the volume counter at base conditions, undisturbed (stream 2)	0	m3	O ^double		Su		
1226	dE2	Increment of the energy counter, undisturbed (stream 2)	0	kWh	O ^double		Su		
1227	dVmD	Increment of the volume counter at measurement conditions, undisturbed	0	m3	O ^double		Su		
1228	dVm2D	Increment of the volume counter at measurement conditions, undisturbed (stream 2)	0	m3	O ^double		Su		
1229	dVb2T	Increment of the volume counter at base conditions, total (stream 2)	0	m3	O ^double		Su		
1230	dE2T	Increment of the energy counter, total (stream 2)	0	kWh	O ^double		Su		
1231	QbLTm	Delay time of notification of exceeding the limit Qb; Range: 0; 3600	0	s	MO ^uint16			3	
1232	QmLTm	Delay time of notification of exceeding the limit Qm; Range: 0; 3600	0	s	MO ^uint16			3	
1233	CurveCorrMode	Correction operation mode (0-certified, 1-extended); Range: 0; 1	0		MO ^uint8	1		7	1
1234	MListRat	Radio technologies available	0		O ^string				
1235	MStd	Connection standard	0		O ^string				
1236	MProtocol	Transmission protocol; Values: 0 - TCP; 1 - CSD; 2 - UDP	0		MO ^uint8			4	1
1237	MReportDelay	Minimum time for event reporting; Range: 0; 60	0	min	MO ^uint8			4	
1238	VerDs23	Version, modem definition	0		O ^uint32				
1239	VerDs24	Version, archives	0		O ^uint32				

## 2 List of alarms – ZD table (FullLOG)

Table which present structure of alarms in the device.

[code] – code of event of alarm used for example to configuration of binary outputs

[name] – name of alarm or event

[amount] – amount of parameters saved with alarm or event

[p1.. p8] – indexes of parameters from DP table saved with alarm or event

	System alarm (main counters of device are stopped!)
	Temporary event
	Permanent event

code	name	amount	p1	p2	p3	p4	p5	p6	Description
0	Device Startup	5	735	0	591	592	593		Start of the device
1	System error	1	591						System error detected
2	Calculation error	5	89	131	0	6	6*		Calculation error was detected
3	algZ range	6	89	131	149	0	6	6*	Values of input parameters used for calculations of Z and Zb exceeded ranges specified for chosen algorithm
4	p1 range	5	89	93	0	6	6*		Value of p1 pressure is out of range p1RMin..p1RMax
5	p2 range	5	112	116	0	6	6*		Value of p2 pressure is out of range p2RMin..p2RMax
6	t range	5	131	132	0	6	6*		Value of temperature t is out of range tRMin..tRMax
7	Qm range	4	57	0	6	6*			Value of flow rate Qm is out of range QmRMin..QmRMax
8	tamb error	2	0	0*					Ambient temperature sensor is faulty
9	tamb range	4	129	0	6	6*			Value of ambient temperature is out of range tambMin..tambMax
10	Battery low	2	0	0*					Battery charge is lower than 10%
11	Ext. supply off	2	0	0*					External power supply disconnected (mode: FULL)
12	Ext. supply low	2	0	0*					Fluctuation of voltage of external power supply (mode: FULL)
13	Keyboard error	1	0						Keyboard fault
14	Software update	6	714	739	733	733	735*	0	Device's software was updated
15	Resources update	6	714	739	734	737	738	735	Performed data update of the device
16	Data erased	4	714	739	721	0			Performed erase of device's data
17	AlarmLOG full	4	586	0	6	6*			Level of fulfillment of alarms memory has reached 100%. Alarms clearing with parameter AlarmLOG is required
18	Case open	2	0	0*					Case open detected
19	Intrusion attempt	3	714	739	0				There were 5 unsuccessful login attempts. Blockade of device programming for 15 minutes.
20	Log in	3	714	739	0				User login into device using keyboard
21	Configuration changed	6	714	739	736	737	738	0	Change of one of the configuration parameters (marked in column 7 of DP table)
22	Value changed	6	714	739	736	737	738	0	Change of value of parameter from DP table (number type)
23	Text changed	3	714	739	736				Change of value of parameter from DP table (text type)
24	Time changed	4	714	739	588	0			Time was changed
25	Counter overrun	4	736	737	738	0			Counter exceeded permissible maximum value (overrun)
26	Gas composition	4	714	739	589	0			Change of parameters connected with gas composition
27	C limit	3	153	0	0*				Value of conversion factor C is out of limit
28	p1 limit W Min	3	89	0	0*				Value of pressure p1 is below p1LWMin
29	p1 limit W Max	3	89	0	0*				Value of pressure p1 is above p1LWMax
30	p1 limit A Min	3	89	0	0*				Value of pressure p1 is below p1LAMin
31	p1 limit A Max	3	89	0	0*				Value of pressure p1 is above p1LAMax
32	p2 limit W Min	3	112	0	0*				Value of pressure p2 is below p2LWMin



code	name	amount	p1	p2	p3	p4	p5	p6	Description
33	p2 limit W Max	3	112	0	0*				Value of pressure p2 is above p2LWMax
34	p2 limit A Min	3	112	0	0*				Value of pressure p2 is below p2LAMin
35	p2 limit A Max	3	112	0	0*				Value of pressure p2 is above p2LAMax
36	t limit	3	131	0	0*				Value of temperature t is below tLMin or above tLMax
37	Qb limit	3	56	0	0*				Value of flow rate Qb is below QbLMin or above QbLMax
38	Qm limit	3	57	0	0*				Value of flow rate Qm is below QmLMin or above QmLMax
39	dVbh 1 limit	3	38	0	0*				Current value of dVbh exceeded dVbhL1
40	dVbh 2 limit	3	39	0	0*				Current value of dVbh exceeded dVbhL2
41	dVbh 3 limit	3	40	0	0*				Current value of dVbh exceeded dVbhL3
42	Vm-Vm2 limit	4	54	55	0	0*			Difference between counters Vm and V2 exceeded tolerance TVmV2 in horizon LVmV2
43	dEh 1 limit	3	45	0	0*				Current value of dEh exceeded dEhL1
44	dEh 2 limit	3	46	0	0*				Current value of dEh exceeded dEhL2
45	dEh 3 limit	3	47	0	0*				Current value of dEh exceeded dEhL3
46	dVb.eph 1 limit	3	50	0	0*				Current value of dVb.eph exceeded ephL1. Alarm will be active to the end of current hour
47	dVb.eph 2 limit	3	51	0	0*				Current value of dVb.eph exceeded ephL2. Alarm will be active to the end of current hour
48	Param1 limit	4	969	973	0*				Value of Param1 is below Param1LMin or above Param1LMax
49	Param2 limit	4	974	978	0*				Value of Param2 is below Param2LMin or above Param2LMax
50	Param3 limit	4	979	983	0*				Value of Param3 is below Param3LMin or above Param3LMax
51	Param4 limit	4	984	988	0*				Value of Param4 is below Param4LMin or above Param4LMax
52	Collective alarm A	3	598	599	600				Detected change of state in group of collective alarm A
53	Collective alarm B	3	598	599	600				Detected change of state in group of collective alarm B
54	Calibration mode	4	714	739	6	6*			Calibration mode is active
55	DI1: DI1	2	0	0*					Detected change of status at digital input DI1
56	DI2: DI2	2	0	0*					Detected change of status at digital input DI2
57	DI3: DI3	2	0	0*					Detected change of status at digital input DI3
58	DI4: DI4	2	0	0*					Detected change of status at digital input DI4
59	DI5: Tamper switch	2	0	0*					Detected change of status at digital input DI5
60	DI6: DI6	2	0	0*					Detected change of status at digital input DI6
61	DI7: DI7	2	0	0*					Detected change of status at digital input DI7
62	DI8: DI8	2	0	0*					Detected change of status at digital input DI8
63	Reverse flow	6	13	13*	14	1	0	6	Detected flow in reverse direction
64	EDI1: EDI1	2	0	0*					Detected change of status at external digital input DI1
65	EDI2: EDI2	2	0	0*					Detected change of status at external digital input DI2
66	EDI3: EDI3	2	0	0*					Detected change of status at external digital input DI3
67	EDI4: EDI4	2	0	0*					Detected change of status at external digital input DI4
68	EDI5: EDI5	2	0	0*					Detected change of status at external digital input DI5
69	EDI6: EDI6	2	0	0*					Detected change of status at external digital input DI6
70	EDI7: EDI7	2	0	0*					Detected change of status at external digital input DI7
71	EDI8: EDI8	2	0	0*					Detected change of status at external digital input DI8
72	Reserve error	3	996	0	0*				An error of reading of external module

\* - value is stored on event close


### 3 Table of important interventions (SetupLOG)

code	name	num	p1	p2	p3	p4	p5	p6
1000	Software update	5	Vb	Account	ConfSrc	SVer	UpCode	
1001	Data erased	4	Vb	Account	ConfSrc	Erasing		
1002	Config. changed	6	Vb	Account	ConfSrc	LastIdx	LastVal1	LastVal2
1005	Intrusion attempt	3	Vb	Account	ConfSrc			
1008	SetupLog erased	3	Vb	Account	ConfSrc			
1010	Resource update	5	Vb	Account	ConfSrc	SVer	UpType	
1111	Record error	0						

### 4 Table of main alarms (AlarmLOG)

code	name	num	p1	p2	p3	p4	p5	p6
0	System error	1	SYS1					
1	Calculation error	5	p1	t	Vb	Vbe	Vbe*	
2	algZ range	5	p1	t	AlgSt	Vb	Vbe	Vbe*
3	p1 range	5	p1	p1St	Vb	Vbe	Vbe*	
4	t range	5	t	tSt	Vb	Vbe	Vbe*	
5	reserved							
6	tamb range	4	tamb	Vb	Vbe	Vbe*		
7	AlarmLOG full	3	Vb	Vbe	Vbe*			
8	Calibration mode	3	Account	Vbe	Vbe*			
9	Device Startup	3	UpCode	SYS1	SYS2			
10	ReverseFlow	6	VmR	VmR*	Vo	Vm	Vb	Vbe
11	Battery low	0						

\* - value is stored on alarm close

 System alarm (main counters of device are stopped!)