

AMS-telegram fra HAN-kontakt  
Versjon: V5

AMS-måler KAIPA  
Type: MA105H2E  
1-fase

Liste 1 - 2 sekund						
Byte nr	Hex kode	Dec kode	Asc kode	Forklaring og OBIS-enheter	Verdier	Bytes
1	7e	126		Flag field - start		1 byte
2	a0	160		Frame format		2 bytes
3	27	39		Bytes in telegram: 39 (11 bit)		2 bytes
4	01	1		Destination address		1 byte
5	02	2		Source adress		1 byte
6	10	16		Control		1 byte
7	5a	90		HCS - Header Check Seq.		2 bytes
8	e7	231		LLC - Dest. LSAP		1 bytes
9	e6	230		LLC - Source LSAP		1 byte
10	0f	15		LLC Quality		1 byte
11	00	0		LLC - Information		5 bytes
12	0f	15				
13	40	64				
14	00	0				
15	00	0				
16	00	0				
17	09	9		String follow (COSEM Date Time)		
18	0c	12		Num. of bytes in string: 12		
19	07	7		Year	2021	2 bytes
20	e5	229				
21	01	1		Month		1 byte
22	1c	28		Date		1 byte
23	04	4		Day number		1 byte
24	0e	14		Time		1 byte
25	3b	59		Minute		1 byte
26	2a	42		Second		1 byte
27	ff	255		Hundr.0xff if not spec.		1 byte
28	80	128		Dev.0x8000 if not spec.		2 bytes
29	00	0				
30	00	0		Clock Status		1 byte
31	02	2		Start OBIS-part		1 byte
32	01	1		Num. of OBIS-units: 1		1 byte
33	06	6		Start OBIS-unit 1		1 byte
34	00	0		Activ Power	4001 W	4 bytes
35	00	0				
36	0f	15				
37	a1	161				
38	88	136		FCS - Frame Check Seq.		2 bytes
39	50	80				
40	7e	126		Flag field - stop		1 byte

Liste 2 - 10 sekund						
Byte nr	Hex kode	Dec kode	Asc kode	Forklaring og OBIS-enheter	Verdier	Bytes
1	7e	126		Flag field - start		1 byte
2	a0	160		Frame format		2 bytes
3	65	101		Bytes in telegram: 101 (11 bit)		2 bytes
4	01	1		Destination address		1 byte
5	02	2		Source adress		1 byte
6	10	16		Control		1 byte
7	f0	240		HCS - Header Check Seq.		2 bytes
8	50	80		LLC - Dest. LSAP		1 bytes
9	e6	230		LLC - Source LSAP		1 byte
10	e7	231		LLC Quality		1 byte
11	00	0		LLC - Information		5 bytes
12	0f	15				
13	40	64				
14	00	0				
15	00	0				
16	00	0				
17	09	9		String follow (COSEM Date Time)		
18	0c	12		Num. of bytes in string: 12		
19	07	7		Year	2021	2 bytes
20	e5	229				
21	01	1		Month		1 byte
22	1c	28		Date		1 byte
23	04	4		Day number		1 byte
24	0e	14		Time		1 byte
25	3b	59		Minute		1 byte
26	28	40		Second		1 byte
27	ff	255		Hundr.0xff if not spec.		1 byte
28	80	128		Dev.0x8000 if not spec.		2 bytes
29	00	0				
30	00	0		Clock Status		1 byte
31	02	2		Start OBIS-part		1 byte
32	09	9		Num. of OBIS-units: 9		1 byte
33	09	9		Start OBIS-unit 1		1 byte
34	07	7		Num. of bytes follow: 7		1 byte
35	4b	75		KOBIS-version	KFM 001	1 byte
36	46	70				
37	4d	77				
38	5f	95				
39	30	48	0			
40	30	48	0			
41	31	49	1			
42	09	9		Start OBIS-unit 2		1 byte
43	10	16		Num. of bytes follow: 16		1 byte
44	xx	ddd	a	Meter ID		
45	xx	ddd	a			
46	xx	ddd	a			
47	xx	ddd	a			
48	xx	ddd	a			
49	xx	ddd	a			
50	xx	ddd	a			
51	xx	ddd	a			
52	xx	ddd	a			
53	xx	ddd	a			
54	xx	ddd	a			
55	xx	ddd	a			
56	xx	ddd	a			
57	xx	ddd	a			
58	xx	ddd	a			
59	xx	ddd	a			
60	09	9		Start OBIS-unit 3		1 byte
61	08	8		Num. of bytes follow: 8		
62	4d	77	M	Meter-type	MA105H2E	
63	41	65	A			
64	31	49	1			
65	30	48	0			
66	35	53	5			
67	48	72	H			
68	32	50	2			
69	45	69	E			
70	06	6		Start OBIS-unit 4		1 byte
71	00	0		Aktiv eff. pos	4004 W	4 bytes
72	00	0				
73	0f	15				
74	a4	164				
75	06	6		Start OBIS-unit 5		1 byte
76	00	0		Aktiv eff. neg	0 W	4 bytes
77	00	0				
78	00	0				
79	00	0				
80	06	6		Start OBIS-unit 6		1 byte
81	00	0		Reaktiv eff. pos	0 VAR	4 bytes
82	00	0				
83	00	0				
84	00	0				
85	06	6		Start OBIS-unit 7		1 byte
86	00	0		Reaktiv eff. neg	151 VAR	4 bytes
87	00	0				
88	00	0				
89	61	97				
90	06	6		Start OBIS-unit 8		1 byte
91	00	0		Strøm	17191 mA	4 bytes
92	00	0				
93	43	67				
94	27	39				
95	06	6		Start OBIS-unit 9		1 byte
96	00	0		Spønning	2338 Vx10	4 bytes
97	00	0				
98	09	9				
99	22	34				
100	99	153		FCS - Frame Check Seq.		2 bytes
101	5d	93				
102	7e	126		Flag field - stop		

Liste 3 - 1 time						
Byte nr	Hex kode	Dec kode	Asc kode	Forklaring og OBIS-enheter	Verdier	Bytes
1	7e	126		Flag field - start		1 byte
2	87	135		Frame format		2 bytes
3	01	1		Bytes in telegram: 135 (11 bit)		
4	02	2		Destination address		2 bytes
5	01	1		Source adress		1 byte
6	10	16		Control		1 byte
7	9e	158		HCS - Header Check Seq.		2 bytes
8	6d	109		LLC - Dest. LSAP		1 bytes
9	e6	230		LLC - Source LSAP		1 byte
10	e7	231		LLC Quality		1 byte
11	00	0		LLC - Information		5 bytes
12	0f	15				
13	40	64				
14	00	0				
15	00	0				
16	00	0				
17	09	9		String follow (COSEM Date Time)		
18	0c	12		Num. of bytes in string: 12		
19	07	7		Year	2021	2 bytes
20	e5	229				
21	01	1		Month		1 byte
22	1c	28		Date		1 byte
23	04	4		Day number		1 byte
24	0f	15		Time		1 byte
25	00	0		Minute		59 1 byte
26	0a	10		Second		42 1 byte
27	ff	255		Hundr.0xff if not spec.		1 byte
28	80	128		Dev.0x8000 if not spec.		2 bytes
29	00	0				
30	00	0		Clock Status		1 byte
31	02	2		Start OBIS-part		1 byte
32	14	20		Num. of OBIS-units: 14		1 byte
33	09	9		Start OBIS-unit 1		1 byte
34	07	7		Num. of bytes follow: 7		1 byte
35	4b	75		KOBIS-version	KFM 001	
36	46	70	F			
37	4d	77	M			
38	5f	95				
39	30	48	0			
40	30	48	0			
41	31	49	1			
42	09	9		Start OBIS-unit 2		1 byte
43	10	16		Num. of bytes follow: 16		1 byte
44	xx	ddd	a	Meter ID		
45	xx	ddd	a			
46	xx	ddd	a			
47	xx	ddd	a			
48	xx	ddd	a			
49	xx	ddd	a			
50	xx	ddd	a			
51	xx	ddd	a			
52	xx	ddd	a			
53	xx	ddd	a			
54	xx	ddd	a			
55	xx	ddd	a			
56	xx	ddd	a			
57	xx	ddd	a			
58	xx	ddd	a			
59	xx	ddd	a			
60	09	9		Start OBIS-unit 3		1 byte
61	08	8		Num. of bytes follow: 8		
62	4d	77	M	Meter-type	MA105H2E	
63	41	65	A			
64	31	49	1			
65	30	48	0			
66	35	53	5			
67	48	72	H			
68	32	50	2			
69	45	69	E			
70	06	6		Start OBIS-unit 4		1 byte
71	00	0		Aktiv eff. pos	4478 W	4 bytes
72	00	0				
73	11	17				
74	7e	126				
75	06	6		Start OBIS-unit 5		1 byte
76	00	0		Aktiv eff. neg	0 W	4 bytes
77	00	0				
78	00	0				
79	00	0				
80	06	6		Start OBIS-unit 6		1 byte
81	00	0		Reaktiv eff. pos	0 Var	4 bytes
82	00	0				
83	00	0				
84	00	0				
85	06	6		Start OBIS-unit 7		1 byte
86	00	0		Reaktiv eff. neg	97 Var	4 bytes
87	00	0				
88	00	0				
89	61	97				
90	06	6		Start OBIS-unit 8		1 byte
91	00	0		Strøm	19233 mA	4 bytes
92	00	0				
93	4b	75				
94	21	33				
95	06	6		Start OBIS-unit 9		1 byte
96	00	0		Spønning	2335 Vx10	4 bytes
97	00	0				
98	09	9				
99	1f	31				
100	09	9		Start OBIS-enhet 10, time energy		1 byte
101	0c	12		Num. of bytes follow: 12		1 byte
102	07	7		År	2021	2 bytes
103	e5	229				
104	01	1		Måned		1 byte
105	1c	28		Dato		1 byte
106	04	4		Dag nr		1 byte
107	0f	15		Time		15 1 byte
108	00	0		Minutt		0 1 byte
109	0a	10		Sekund		10 1 byte
110	ff	255		Hundr.0xff if not spec.		1 byte
111	80	128		Dev.0x8000 if not spec.		2 bytes
112	00	0				
113	00	0		Clock Status		1 byte
114	06	6		Start OBIS-enhet 11		1 byte
115	01	1		Aktiv energi pos	30619318 Wh	4 bytes
116	d3	211				
117	36	54				
118	be	182				
119	06	6		Start OBIS-enhet 12		1 byte
120	00	0		Aktiv energi neg	0 Wh	4 bytes
121	00	0				
122	00	0				
123	00	0				
124	06	6		Start OBIS-enhet 13		1 byte
125	00	0		Reaktiv "energi" pos	13693 VArh	4 bytes
126	00	0				
127	35	53				
128	7d	125				
129	06	6		Start OBIS-enhet 14		1 byte
130	00	0		Reaktiv "energi" neg	2483394 VArh	4 bytes
131	25	37				
132	e4	228				
133	c2	194				
134	c2	194		PCS - Frame Check Seq.		2 bytes
135	d6	214				
136	7e	126		Flag field - ston		