

AMS-telegram fra HAN-kontakt  
Versjon: V4

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	40	64				
13	00	0				
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 is 12		
19	07	7		Year	2021	2 bytes
20	e5	229				
21	01	1		Month	1	1 byte
22	1c	28		Date	28	1 byte
23	04	4		Day number	4	1 byte
24	0e	14		Time	14	1 byte
25	3b	59		Minute	59	1 byte
26	2a	42		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	01	1		Num. of OBIS-units is 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	0f	15		LLC Quality		1 byte
11	00	0		LLC - Information		5 bytes
12	40	64				
13	00	0				
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 is 12		
19	07	7		Year	2021	2 bytes
20	e5	229				
21	01	1		Month	1	1 byte
22	1c	28		Date	28	1 byte
23	04	4		Day number	4	1 byte
24	0e	14		Time	14	1 byte
25	3b	59		Minute	59	1 byte
26	28	40		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	09	9		Num. of OBIS-units is 9		1 byte
33	09	9		Start OBIS-unit 1		1 byte
34	07	7		Antall etterfølgende tegn er 7		
35	4b	75		KOBIS-version	KFM 001	
36	46	70				
37	4d	77				
38	5f	95				
39	30	48				
40	30	48				
41	31	49				
42	09	9		Start OBIS-unit 2		
43	10	16		Num.of bytes 16		
44	xx	ddd		aMeter 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		
61	08	8		Num.of bytes 8		
62	4d	77		Meter-type	MA105H2E	
63	41	65		A		
64	31	49				
65	30	48				
66	35	53				
67	48	72				
68	32	50				
69	45	69				
70	06	6		Start OBIS-unit 4		
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		
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		
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		
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		
91	00	0		Strøm	17191 mA	4 bytes
92	00	0				
93	43	67				
94	27	39				
95	06	6		Start OBIS-unit 9		
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	a0	160		Frame format		2 bytes
3	87	135		Bytes in telegram: 135 (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	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	0f	15		LLC Quality		1 byte
11	00	0		LLC - Information		5 bytes
12	40	64				
13	00	0				
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 is 12		
19	07	7		Year	2021	2 bytes
20	e5	229				
21	01	1		Month	1	1 byte
22	1c	28		Date	28	1 byte
23	04	4		Day number	4	1 byte
24	0f	15		Time	15	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	0e	14		Num. of OBIS-units is 14		1 byte
33	09	9		Start OBIS-unit 1		1 byte
34	07	7		Antall etterfølgende tegn er 7		
35	4b	75		KOBIS-version	KFM 001	
36	46	70				
37	4d	77				
38	5f	95				
39	30	48				
40	30	48				
41	31	49				
42	09	9		Start OBIS-unit 2		
43	10	16		Num.of bytes 16		
44	xx	ddd		aMeter 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		
61	08	8		Num.of bytes 8		
62	4d	77		Meter-type	MA105H2E	
63	41	65		A		
64	31	49				
65	30	48				
66	35	53				
67	48	72				
68	32	50				
69	45	69				
70	06	6		Start OBIS-unit 4		
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		
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		
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		
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		
91	00	0		Strøm	19233 mA	4 bytes
92	00	0				
93	4b	75				
94	21	33				
95	06	6		Start OBIS-unit 9		
96	00	0		Spønning	2335 Vx10	4 bytes
97	00	0				
98	09	9				
99	1f	31				
100	09	9		Start OBIS-enhet 10, tidstemping energi		
101	0c	12		Antall etterfølgende tegn er 12		
102	07	7		År	2021	2 bytes
103	e5	229				
104	01	1		Måned	1	1 byte
105	1c	28		Dato	28	1 byte
106	04	4		Dag nr	4	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				
111	80	128				
112	00	0				
113	00	0				
114	06	6		Start OBIS-enhet 11		
115	01	1		Aktiv energi pos	30619318 Wh	4 bytes
116	d3	211				
117	36	54				
118	b6	182				
119	06	6		Start OBIS-enhet 12		</