

KOSMOS SERIE

CODE: EDITION: 20260701

MODBUS MAP ADDRESSES



MICRA-D

(From version D2.00)



Programming Data (Read/Write)

Word	Byte	Variable	Description
0	0	Sensor type	0 =10-300V, 1 = Pickup (Magnetic) , 2 =NAMUR, 3 = PNP sensor, 4 = NPN sensor, 5 =TTL/24V Encoder, 6 =Contact closure
	1	Input Mode	0 =Counter, 1 =Chronometer, 2 = Frequency meter, 3 =Tachometer
1	2	Counting Direction	0 =UP, 1 =DOWN, 2 =UP/DOWN
	3	Unidirectional Counter / Chrono. Inputs A and B Mode	0 =IN A, 1 =IN AB
2	4	Bidirectional counter Inputs A and B Mode	0 = Independent, 1 = Directional, 2 = Phase
	5	Total Mode	0 =Relative, 1 =Absolut
3	6	Chronometer mode	0 =UP, 1 =DOWN
	7	Chronometer scale	0 =Hr, 1 =H:MM, 2 =M:SS, 3 =0.01S
4	8	Tachometer mode	0 =RPM, 1 =RATE, 2 =DUTY
	9	Tachometer scale "Rate"	0 =Direct, 1 =Inverse, 2 =Linear
5	10	-	<i>reserved = 0</i>
	11	Input Frequency 1	Digit 4
6	12	Tachometer scale[5]	Digit 3
	13		Digit 2
7	14		Digit 1
	15		Digit 0
8	16	Frequency Decimal Point	0 =99999, 1 =9999.9, 2 =999.99
	17	Display 1	Digit 4
9	18	Tachometer scale[5]	Digit 3
	19		Digit 2
10	20		Digit 1
	21		Digit 0
11	22	Input frequency 2	Digit 4
	23		Digit 3
12	24	Tachometer scale[5]	Digit 2
	25		Digit 1
13	26		Digit 0
	27	Display 2	Digit 4
14	28	Tachometer scale[5]	Digit 3
	29		Digit 2
15	30		Digit 1
	31		Digit 0
16	32	Total	0 =No, 1 =Yes
	33	Display Process Decimal point	0 =99999, 1 =9999.9, 2 =999.99, 3 =99.999, 4 =9.9999
17	34	Display Total Decimal point	0 =99999999, 1 =9999999.9, 2 =999999.99, 3 =99999.999, 4 =9999.9999

18	35	Limit time Tachometer [3] (00.1s to 99.9 s)	Digit 2
	36		Digit 1
	37		Digit 0
19	38	Average time Tachometer [2] (0.1s to 9.9 s)	Digit 1
	39		Digit 0
20	40	Pulses per revolution Tachometer RPM [5]	Digit 4
	41		Digit 3
21	42		Digit 2
	43		Digit 1
22	44		Digit 0
	45		Counter/ Chrono. Offset Process [5]
23	46	Digit 3	
	47	Digit 2	
24	48	Digit 1	
	49	Digit 0	
25	50	Counter/ Chrono. Offset Total [8]	Digit 7 (sign)
	51		Digit 6
26	52		Digit 5
	53		Digit 4
27	54		Digit 3
	55		Digit 2
28	56		Digit 1
	57		Digit 0
29	58	Process Factor [5]	Digit 4
	59		Digit 3
30	60		Digit 2
	61	Digit 1	
31	62	Digit 0	
	63	Process Factor Decimal Point	0=99999, 1=9999.9, 2=999.99, 3=99.999, 4=9.9999
32	64	Process Factor Mult / Div	0=Multiplier, 1=Divider
	65	Total Factor [5]	Digit 4
33	66		Digit 3
	67		Digit 2
34	68	Digit 1	
	69	Digit 0	
35	70	Total Factor Decimal Point	0=99999, 1=9999.9, 2=999.99, 3=99.999, 4=9.9999
	71	Total Counter Factor Mult / Div	0=Multiplier, 1=Divider
36	72	Mode RUN Color	0=Amber, 1=Red, 2=Green
	73	Mode PROG Color	0=Amber, 1=Red, 2=Green
37	74	Mode Total Color	0=Amber, 1=Red, 2=Green
	75	ECO Mode	0=OFF, 1=ON
38	76	Brightness	0=High, 1=Low

	77	-	<i>reserved = 0</i>	
39	78	ECO Mode Minutes [2] (00 to 99 min)	Digit 1	
	79		Digit 0	
40	80	Setpoint 1 Value [8]	Digit 7 (sign if Total)	
	81		Digit 6 (if Total)	
41	82		Digit 5 (if Total)	
	83		Digit 4 (sign if Process)	
42	84		Digit 3	
	85		Digit 2	
43	86		Digit 1	
	87		Digit 0	
44	88		Setpoint 2 Value [8]	Digit 7 (sign if Total)
	89			Digit 6 (if Total)
45	90	Digit 5 (if Total)		
	91	Digit 4 (sign if Process)		
46	92	Digit 3		
	93	Digit 2		
47	94	Digit 1		
	95	Digit 0		
48	96	Setpoint 3 Value [8]		Digit 7 (sign if Total)
	97			Digit 6 (if Total)
49	98		Digit 5 (if Total)	
	99		Digit 4 (sign if Process)	
50	100		Digit 3	
	101		Digit 2	
51	102		Digit 1	
	103		Digit 0	
52	104		Setpoint 4 Value [8]	Digit 7 (sign if Total)
	105			Digit 6 (if Total)
53	106	Digit 5 (if Total)		
	107	Digit 4 (sign if Process)		
54	108	Digit 3		
	109	Digit 2		
55	110	Digit 1		
	111	Digit 0		
56	112	Delay (0 to 99 s) / Hysteresis Setpoint 1 Mode Frec / Tach [5]		Digit 4 (if Hysteresis)
	113			Digit 3 (if Hysteresis)
57	114		Digit 2 (if Hysteresis)	
	115		Digit 1	
58	116		Digit 0	
	117	Delay (0 to 99 s) / Hysteresis Setpoint 2 Mode Frec / Tach [5]	Digit 4 (if Hysteresis)	
59	118		Digit 3 (if Hysteresis)	
	119		Digit 2 (if Hysteresis)	
60	120		Digit 1	
	121		Digit 0	

61	122	Delay (0 to 99 s) / Hysteresis Setpoint 3 Mode Frec / Tach [5]	Digit 4 (if Hysteresis)
	123		Digit 3 (if Hysteresis)
62	124		Digit 2 (if Hysteresis)
	125		Digit 1
63	126		Digit 0
	127		Delay (0 to 99 s) / Hysteresis Setpoint 4 Mode Frec / Tach [5]
64	128		Digit 4 (if Hysteresis)
	129		Digit 3 (if Hysteresis)
65	130		Digit 2 (if Hysteresis)
	131		Digit 1
66	132	Setpoint 1 Pulse Time [2] (1 to 99 s) Mode Counter / Crono	Digit 0
	133		Digit 1
67	134	Setpoint 2 Pulse Time [2] (1 to 99 s) Mode Counter / Crono	Digit 0
	135		Digit 1
68	136	Setpoint 3 Pulse Time [2] (1 to 99 s) Mode Counter / Crono	Digit 0
	137		Digit 1
69	138	Setpoint 4 Pulse Time [2] (1 to 99 s) Mode Counter / Crono	Digit 0
	139		Digit 1
70	140	Pulse / Latch Mode Setpoint 1	0=Latch, 1=Pulse
	141	Pulse / Latch Mode Setpoint 2	0=Latch, 1=Pulse
71	142	Pulse / Latch Mode Setpoint 3	0=Latch, 1=Pulse
	143	Pulse / Latch Mode Setpoint 4	0=Latch, 1=Pulse
72	144	ON/OFF Setpoint 1	0=OFF, 1=ON
	145	ON/OFF Setpoint 2	0=OFF, 1=ON, (2=Track, -if Frec / Tach-)
73	146	ON/OFF Setpoint 3	0=OFF, 1=ON
	147	ON/OFF Setpoint 4	0=OFF, 1=ON, (2=Track, -if Frec / Tach-)
74	148	HI/LO Setpoint 1	0=HI, 1=LO, (2=LO2, -if Frec / Tach-)
	149	HI/LO Setpoint 2	0=HI, 1=LO, (2=LO2, -if Frec / Tach-)
75	150	HI/LO Setpoint 3	0=HI, 1=LO, (2=LO2, -if Frec / Tach-)
	151	HI/LO Setpoint 4	0=HI, 1=LO, (2=LO2, -if Frec / Tach-)
76	152	Delay / Hysteresis Setpoint 1	0=DLY, 1=HYS
	153	Delay / Hysteresis Setpoint 2	0=DLY, 1=HYS
77	154	Delay / Hysteresis Setpoint 3	0=DLY, 1=HYS
	155	Delay / Hysteresis Setpoint 4	0=DLY, 1=HYS
78	156	Setpoint 1 Comparison Value	0=Process, 1=Total
	157	Setpoint 2 Comparison Value	0=Process, 1=Total
79	158	Setpoint 3 Comparison Value	0=Process, 1=Total
	159	Setpoint 4 Comparison Value	0=Process, 1=Total
80	160	Functions Setpoint 1 Count / Crono	0=No, 1=Reset, 2=Stop, 3=Clear, 4=Chain
	161	Functions Setpoint 2 Count / Crono	0=No, 1=Reset, 2=Stop, 3=Clear, 4=Chain
81	162	Functions Setpoint 3 Count / Crono	0=No, 1=Reset, 2=Stop, 3=Clear, 4=Chain
	163	Functions Setpoint 4 Count / Crono	0=No, 1=Reset, 2=Stop, 3=Clear, 4=Chain
82	164	Setpoint 1 Color	0=No Change, 1=Amber, 2=Red, 3=Green
	165	Setpoint 2 Color	0=No Change, 1=Amber, 2=Red, 3=Green
83	166	Setpoint 3 Color	0=No Change, 1=Amber, 2=Red, 3=Green

	167	Setpoint 4 Color	0=No Change, 1=Amber, 2=Red, 3=Green
84	168	<i>reserved</i>	
	169	Analogue Output Comparison Value	0=Process, 1=Total
85	170	Analogue Output Value High [8]	Digit 7 (sign if Total)
	171		Digit 6 (if Total)
86	172		Digit 5 (if Total)
	173		Digit 4 (sign if Process)
87	174		Digit 3
	175		Digit 2
88	176		Digit 1
	177		Digit 0
89	178	Analogue Output Value Low [8]	Digit 7 (sign if Total)
	179		Digit 6 (if Total)
90	180		Digit 5 (if Total)
	181		Digit 4 (sign if Process)
91	182		Digit 3
	183		Digit 2
92	184		Digit 1
	185		Digit 0
93	186	Locking code [4]	Digit 3
	187		Digit 2
94	188		Digit 1
	189		Digit 0
95	190	Programming Lock (1)	Bit 0 : Lock Set 1 Bit 1 : Lock Set 2 Bit 2 : Lock Set 3 Bit 3 : Lock Set 4 Bit 4 : Lock Input Bit 5 : Lock Display
	191	Programming Lock (2)	Bit 0 : Lock Prog Direct Setpoints Bit 1 : Lock RS / ETH Ports Bit 2 : Lock Logical Functions Bit 3 : Total Lock (except Keypad) Bit 4 : Lock Analogue Output
96	192	Programming Lock (y 3)	Bit 0 : Lock Brightness-Color-Eco Bit 1 : Lock RESET Key (UP) Bit 2 : Lock VISUAL Key (SHIFT)
	193	Logic Function IN 1	Functions List :
97	194	Logic Function IN 2	1 :
	195	Logic Function IN 3	2 : ...
98	196	Print Date and Hour	0=No, 1=Yes
	197	<i>reserved</i>	

Programming Data (Read Only)

99	198	IP adress Ethernet Port	IPAddress [0]
	199		IPAddress [1]
100	200		IPAddress [2]
	201		IPAddress [3]
101	202	Unit Adresse RS232/485 Port	RS Address [0]
	203		RS Address [1]
102	204	Baud Rate RS232/485	0=1200, 1=2400, 2=4800, 3=9600, 4=19200
	205	Protocol RS232/485	0=ASCII, 1=ISO1745, 2=Modbus RTU
103	206	Delay Response RS485	0=No, 1=30ms, 2=60ms, 3=120ms, 4=250ms
	207	<i>reserved</i>	<i>reserved</i>

Dynamic Values (Read Only)

122	244	Max Value (Peak)	
	245		
	246		
	247		
124	248	Min Value (Val)	
	249		
	250		
	251		
126	252	Process Value	
	253		
	254		
	255		
128	256	Total Value	
	257		
	258		
	259		
130	260	Sign Overflow Total	
	261	Sign Overflow Process	
131	262	Overflow Total	
	263	Overflow Process	
132	264	Offset Total Value	
	265		
	266		
	267		
134	268	Offset Process Value	
	269		
	270		
	271		

136	272	Setpoint 1 Value	
	273		
	274		
	275		
138	276		Setpoint 2 Value
	277		
	278		
	279		
140	280	Setpoint 3 Value	
	281		
	282		
	283		
142	284		Setpoint 4 Value
	285		
	286		
	287		
144	288	Status Relay / Alarm Setpoint 1	
	289	Status Relay / Alarm Setpoint 2	
145	290	Status Relay / Alarm Setpoint 3	
	291	Status Relay / Alarm Setpoint 4	
146	292	Actual Display Color	
	293	Actual Display Brightness	
147	294	Status Chronometer	
	295	installed Options	
148	296	Software Version	200
	297	Hardware Version	"d"
149	298		
	299		

Dynamic Values (Write Only)			
1134	2268	Offset Process Value	Not saved in memory
	2269		
	2270		
	2271		
1136	2272		
	2273		
	2274		
	2275		
1138	2276	Setpoint 2 Value	Not saved in memory
	2277		
	2278		

	2279		
1140	2280	Setpoint 3 Value	Not saved in memory
	2281		
	2282		
	2283		
1142	2284	Setpoint 4 Value	Not saved in memory
	2285		
	2286		
	2287		

Commands			
116 (0x74)	"t"	Offset	Add the display value to the Offset memory. Default Offset value is "0". Not saved in memory. *01 05 00 74 FF 00 CC 20
114 (0x72)	"r"	Reset	Reset the Offset value to "0". *01 05 00 72 FF 00 2C 21
112 (0x70)	"p"	Reset Max	Reset the MAX ("Peak") value. *01 05 00 70 FF 00 8D E1
118 (0x76)	"v"	Reset Min	Reset the MIN ("Val") value. *01 05 00 76 FF 00 6D E0
100 (0x64)	"d"	Reset Main Counter	Reset the counter. *01 05 00 64 FF 00 CD E5
122 (0x7A)	"z"	Reset Total Counter	Reset the totalizer. *01 05 00 7A FF 00 AD E3
98+49 (0x62 + 0x31)	"b1"	Brightness HI	Change the display brightness to HI. Not saved in memory. *01 05 62 31 FF 00 C2 4D
98+50 (0x62 + 0x32)	"b2"	Brightness LO	Change the display brightness to LO. Not saved in memory. *01 05 62 32 FF 00 32 4D
99+49 (0x63 + 0x31)	"c1"	Color Display Orange	Change the color display to Orange. Not saved in memory. *01 05 63 31 FF 00 C3 B1
99+50 (0x63 + 0x32)	"c2"	Color Display Red	Change the color display to Red. Not saved in memory. *01 05 63 32 FF 00 33 B1
99+51 (0x63 + 0x33)	"c3"	Color Display Green	Change the color display to Red. Not saved in memory. *01 05 63 33 FF 00 62 71
104+115 (0x68+0x73)	"hs"	Start Chronometer	Start the Chronometer Mode. *01 05 68 73 FF 00 61 81
104+116 (0x68+0x74)	"ht"	Stop Chronometer	Stop the Chronometer Mode. *01 05 68 74 FF 00 D0 40

* Example of frame in hexadecimal for unit n° 1 in Modbus RTU communication.
 In Modbus TCP/IP protocol an header of 6 bytes is added and the last 2 bytes of CRC are not used.