

# KOSMOS SERIES

CODE: 3072753 EDITION: 21.10.2015

## MODBUS MAP ADDRESSES



## MICRA-M

(M2.00 or higher)



## MODBUS MAP ADDRESSES

Programming Data (Read/Write)			
Word	Byte	Variable	Description
0	0	InputType	0=Process, 1=Load Cell, 2=Temperature
	1	ProcessType	0=10V, 1=20mA
1	2	LoadRange	0=15mV, 1=30mV, 2=150mV
	3	TempInput	0=Pt100, 1=Thermocouple
2	4	TCType	0=J, 1=K, 2=T, 3=N
	5	TempUnits	0=°C, 1=°F
3	6	TempDecP	0=1°, 1=0.1°
	7	NScalingPoints	2 to 11
4	8	Input 1 [5]	Digit 4
	9		Digit 3
5	10		Digit 2
	11		Digit 1
6	12		Digit 0
7	13	Input 2 [5]	Digit 4
	14		Digit 3
	15		Digit 2
8	16	Input 3 [5]	Digit 1
	17		Digit 0
9	18	Input 3 [5]	Digit 4
	19		Digit 3
10	20	Input 3 [5]	Digit 2
	21		Digit 1
11	22	Input 3 [5]	Digit 0

12	23	Input 4 [5]	Digit 4
	24		Digit 3
	25		Digit 2
13	26	Input 4 [5]	Digit 1
	27		Digit 0
14	28	Input 5 [5]	Digit 4
	29		Digit 3
15	30	Input 5 [5]	Digit 2
	31		Digit 1
16	32	Input 5 [5]	Digit 0
	33		Input 6 [5]
17	34	Digit 3	
	35	Digit 2	
18	36	Input 6 [5]	Digit 1
	37		Digit 0
19	38	Input 7 [5]	Digit 4
	39		Digit 3
20	40	Input 7 [5]	Digit 2
	41		Digit 1
21	42	Input 7 [5]	Digit 0
	43		Input 8 [5]
22	44	Digit 3	
	45	Digit 2	
23	46	Input 8 [5]	Digit 1
	47		Digit 0

24	48	Input 9 [5]	Digit 4
	49		Digit 3
25	50		Digit 2
	51		Digit 1
26	52		Digit 0
	53	Input 10 [5]	Digit 4
27	54		Digit 3
	55		Digit 2
28	56		Digit 1
	57		Digit 0
29	58	Input 11 [5]	Digit 4
	59		Digit 3
30	60		Digit 2
	61		Digit 1
31	62		Digit 0
	63	Display 1 [5]	Digit 4
32	64		Digit 3
	65		Digit 2
33	66		Digit 1
	67		Digit 0
34	68	Display 2 [5]	Digit 4
	69		Digit 3
35	70		Digit 2
	71		Digit 1
36	72		Digit 0
	73	Display 3 [5]	Digit 4
37	74		Digit 3
	75		Digit 2

38	76		Digit 1	
	77		Digit 0	
39	78		Display 4 [5]	Digit 4
	79			Digit 3
40	80			Digit 2
	81	Digit 1		
41	82	Digit 0		
42	83	Display 5 [5]	Digit 4	
	84		Digit 3	
	85		Digit 2	
43	86		Digit 1	
	87		Digit 0	
44	88	Display 6 [5]	Digit 4	
	89		Digit 3	
45	90		Digit 2	
	91		Digit 1	
46	92		Digit 0	
47	93	Display 7 [5]	Digit 4	
	94		Digit 3	
	95		Digit 2	
48	96		Digit 1	
	97		Digit 0	
49	98	Display 8 [5]	Digit 4	
	99		Digit 3	
50	100		Digit 2	
	101		Digit 1	
51	102		Digit 0	
	103	Display 9 [5]	Digit 4	

52	104		Digit 3
	105		Digit 2
53	106		Digit 1
	107		Digit 0
54	108	Display 10 [5]	Digit 4
	109		Digit 3
55	110		Digit 2
	111		Digit 1
56	112	Display 11 [5]	Digit 0
	113		Digit 4
57	114		Digit 3
	115		Digit 2
58	116	Digit 1	
	117	Digit 0	
59	118	DecimalPoint	<b>0</b> =99999, <b>1</b> =9999.9, <b>2</b> =999.99, <b>3</b> =99.999, <b>4</b> =9.9999
	119	OffsetTemp [3]	Digit 2
60	120		Digit 1
	121		Digit 0
61	122	FilterP	0 to 9
	123	<i>reserved</i>	
62	124	Round	<b>0</b> =01, <b>1</b> =02, <b>2</b> =05, <b>3</b> =10
	125	Input Error Limit	<b>0</b> =NO, <b>1</b> =YES
63	126	Tare Mode	<b>0</b> =Tare1, <b>1</b> =Tare2, <b>2</b> =Tare3
	127	Tare Set Value [5]	Digit 4
64	128		Digit 3
	129		Digit 2

65	130		Digit 1
	131		Digit 0
66	132	Mode RUN Color	<b>0</b> =Amber, <b>1</b> =Red, <b>2</b> =Green
	133	Mode PROG Color	<b>0</b> =Amber, <b>1</b> =Red, <b>2</b> =Green
67	134	Brightness	<b>0</b> =HI, <b>1</b> =LO
	135	ECO Mode	<b>0</b> =OFF, <b>1</b> =ON
68	136	ECO Mode Minutes [2] (00 to 99 min)	Digit 1
	137		Digit 0
69	138	Setpoint 1 Value [5]	Digit 4
	139		Digit 3
70	140		Digit 2
	141		Digit 1
71	142	Setpoint 2 Value [5]	Digit 0
	143		Digit 4
72	144		Digit 3
	145		Digit 2
73	146	Digit 1	
	147	Digit 0	
74	148	Setpoint 3 Value [5]	Digit 4
	149		Digit 3
75	150		Digit 2
	151		Digit 1
76	152	Digit 0	
	153	Setpoint 4 Value [5]	Digit 4
77	154	Digit 3	
	155	Digit 2	

78	156		Digit 1
	157		Digit 0
79	158	Setpoint 1 Delay/Hysteresis [5]	Digit 4 (if Hysteresis)
	159		Digit 3 (if Hysteresis)
80	160		Digit 2 (if Hysteresis)
	161		Digit 1
81	162		Digit 0
82	163	Setpoint 2 Delay/Hysteresis [5]	Digit 4 (if Hysteresis)
	164		Digit 3 (if Hysteresis)
	165		Digit 2 (if Hysteresis)
83	166		Digit 1
	167		Digit 0
84	168	Setpoint 3 Delay/Hysteresis [5]	Digit 4 (if Hysteresis)
	169		Digit 3 (if Hysteresis)
85	170		Digit 2 (if Hysteresis)
	171	Digit 1	
86	172		Digit 0
	173		Digit 4 (if Hysteresis)
87	174	Setpoint 4 Delay/Hysteresis [5]	Digit 3 (if Hysteresis)
	175		Digit 2 (if Hysteresis)
88	176		Digit 1
	177	Digit 0	
89	178	<i>reserved</i>	
	179		
90	180	<i>reserved</i>	
	181		
91	182	<i>reserved</i>	
	183		

92	184	<i>reserved</i>	
	185		
93	186	ON/OFF Setpoint 1	<b>0=OFF, 1=ON</b>
	187	ON/OFF Setpoint 2	<b>0=OFF, 1=ON</b>
94	188	ON/OFF Setpoint 3	<b>0=OFF, 1=ON</b>
	189	ON/OFF Setpoint 4	<b>0=OFF, 1=ON</b>
95	190	HI/LO Setpoint 1	<b>0=HI, 1=LO</b>
	191	HI/LO Setpoint 2	<b>0=HI, 1=LO</b>
96	192	HI/LO Setpoint 3	<b>0=HI, 1=LO</b>
	193	HI/LO Setpoint 4	<b>0=HI, 1=LO</b>
97	194	Setpoint 1 Delay / Hysteresis	<b>0=DLY, 1=HYS</b>
	195	Setpoint 2 Delay / Hysteresis	<b>0=DLY, 1=HYS</b>
98	196	Setpoint 3 Delay / Hysteresis	<b>0=DLY, 1=HYS</b>
	197	Setpoint 4 Delay / Hysteresis	<b>0=DLY, 1=HYS</b>
99	198	NoNc Setpoint 1	<b>0=NO, 1=NC</b>
	199	NoNc Setpoint 2	<b>0=NO, 1=NC</b>
100	200	NoNc Setpoint 3	<b>0=NO, 1=NC</b>
	201	NoNc Setpoint 4	<b>0=NO, 1=NC</b>
101	202	Setpoint 1 Comparison Value	<b>0=Net, 1=Gross</b>
	203	Setpoint 2 Comparison Value	<b>0=Net, 1=Gross</b>

102	204	Setpoint 3 Comparison Value	0=Net, 1=Gross
	205	Setpoint 4 Comparison Value	0=Net, 1=Gross
103	206	Setpoint 1 Color	0=No Change, 1=Amber, 2=Red, 3=Green
	207	Setpoint 2 Color	0=No Change, 1=Amber, 2=Red, 3=Green
104	208	Setpoint 3 Color	0=No Change, 1=Amber, 2=Red, 3=Green
	209	Setpoint 4 Color	0=No Change, 1=Amber, 2=Red, 3=Green
105	210	<i>reserved</i>	
	211	<i>reserved</i>	
106	212	<i>reserved</i>	
	213	<i>reserved</i>	
107	214	Analogue Output HI [5]	Digit 4 (if Hysteresis)
	215		Digit 3 (if Hysteresis)
108	216		Digit 2 (if Hysteresis)
	217		Digit 1
109	218		Digit 0
	219	Analogue Output LO [5]	Digit 4 (if Hysteresis)
110	220		Digit 3 (if Hysteresis)
	221		Digit 2 (if Hysteresis)
111	222		
	223		Digit 0

112	224	<i>reserved</i>	
	225	On Error Analogue Output	0=HI, 1=LO
113	226	Locking code [4]	Digit 3
	227		Digit 2
114	228		Digit 1
	229		Digit 0
115	230	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 Bit 6 : Lock Filter
	231	Programming Lock (2)	Bit 0 : Lock Prog Direct Setpoints Bit 1 : Lock RS / ETH ports Bit 2 : Lock Logical Functions <b>Bit 3 : Total Lock (except keypad)</b> Bit 4 : Lock Analogue Output
116	232	Programming Lock (3)	Bit 0 : Lock Brightness-Color-Eco Bit 1 : - Bit 2 : Lock TARE key Bit 3 : Lock MAX/MIN key
	233	Logic Function IN 1	Functions List :
117	234	Logic Function IN 2	1 :
	235	Logic Function IN 3	2 : ...

## Programming Data (Read Only)

118	236	IP address Ethernet Port	IPAddress [0]
	237		IPAddress [1]
119	238		IPAddress [2]
	239		IPAddress [3]
120	240	Unit Adresse RS232/485 Port	RS Address [0]
	241		RS Address [1]
121	242	Baud Rate RS232/485	<b>0</b> =1200, <b>1</b> =2400, <b>2</b> =4800, <b>3</b> =9600, <b>4</b> =19200
	243	Protocol RS232/485	<b>0</b> =ASCII, <b>1</b> =ISO1745, <b>2</b> =Modbus RTU
122	244	Delay Response RS485	<b>0</b> =No, <b>1</b> =30ms, <b>2</b> =60ms, <b>3</b> =120ms, <b>4</b> =250ms
	245	<i>reserved</i>	

## Dynamic Values (Read Only)

131	262	Display Value ( Long Format)	
	263		
132	264		
	265		
133	266	Input Value ( Long Format)	
	267		
134	268		
	269		

135	270	Display Decimal Point	<b>0</b> =99999, <b>1</b> =9999.9, <b>2</b> =999.99, <b>3</b> =99.999, <b>4</b> =9.9999
	271	Input Decimal Point	<b>0</b> =99999, <b>1</b> =9999.9, <b>2</b> =999.99, <b>3</b> =99.999, <b>4</b> =9.9999
136	272	Tare Set Value ( Long Format)	
	273		
137	274		
	275		
138	276	Tare Value ( Long Format)	
	277		
139	278		
	279		
140	280	Max Value ( Long Format)	
	281		
141	282		
	283		
142	284	Min Value ( Long Format)	
	285		
143	286		
	287		
144	288	Overflow Input Sign (actual or last)	<b>0</b> ="+", <b>1</b> ="-"
	289	Overflow Display Sign (actual or last)	<b>0</b> ="+", <b>1</b> ="-"
145	290	Overflow Input	<b>0</b> = NO, <b>1</b> =Yes
	291	Overflow Display	<b>0</b> = NO, <b>1</b> =Yes

146	292	Setpoint 1 Value ( Long Format)	
	293		
147	294		
	295		
148	296	Setpoint 2 Value ( Long Format)	
	297		
149	298		
	299		
150	300	Setpoint 3 Value ( Long Format)	
	301		
151	302		
	303		
152	304	Setpoint 4 Value ( Long Format)	
	305		
153	306		
	307		
154	308	<i>reserved</i>	
	309	<i>reserved</i>	
155	310	<i>reserved</i>	
	311	<i>reserved</i>	
156	312	Status Alarm Setpoint 1	
	313	Status Alarm Setpoint 2	
157	314	Status Alarm Setpoint 3	
	315	Status Alarm Setpoint 4	
158	316	Actual Display Color	<b>0</b> =Amber, <b>1</b> =Red, <b>2</b> =Green
	317	Actual Display Brightness	<b>0</b> =HI, <b>1</b> =LO
159	318	Sensor Break Error	<b>0</b> = NO, <b>1</b> =Yes
	319	Input Limit Error	<b>0</b> = NO, <b>1</b> =Yes

160	320	installed Options	
	321	<i>reserved</i>	
161	322	Software Version	200
	323	Hardware Version	0x6D = "m"
<b>Dynamic Values (Write Only)</b>			
1136	2272	Tare Set Value ( Long Format)	Not saved in memory
	2273		
	2274		
1146	2276	Setpoint 1 Value ( Long Format)	Not saved in memory
	2277		
1147	2278		
	2279		
1148	2280	Setpoint 2 Value ( Long Format) Cal_Pointer	Not saved in memory
	2281		
1149	2282		
	2283		
1150	2284	Setpoint 3 Value ( Long Format)	Not saved in memory
	2285		
1151	2286		
	2287		
1152	2288	Setpoint 4 Value ( Long Format)	Not saved in memory
	2289		
1153	2290		
	2291		

## Commands

116	"t"	Tare	Add display value to tare memory and set the display to zero. Sample of frame in hexadecimal for unit n° 1 : 01 05 00 74 FF 00 CC 20
114	"r"	Tare Reset	Add the tare value to the display value and clear the tare memory. Sample of frame in hexadecimal for unit n° 1 : 01 05 00 72 FF 00 2C 21
112	"p"	Reset Max	Reset the MAX ("Peak") value. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 00 70 FF 00 8D E1
118	"v"	Reset Min	Reset the MIN ("Val") value. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 00 76 FF 00 6D E0
98+49	"b1"	Brightness HI	Change the display brightness to HI. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 62 31 FF 00 C2 4D
98+50	"b2"	Brightness LO	Change the display brightness to LO. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 62 32 FF 00 32 4D
99+49	"c1"	Color Display Orange	Change the color display to Orange. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 63 31 FF 00 C3 B1
99+50	"c2"	Color Display Red	change the color display to Red. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 63 32 FF 00 33 B1
99+51	"c3"	Color Display Green	change the color display to Red. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 63 33 FF 00 62 71





**DISEÑOS Y TECNOLOGIA, S.A.**

Polígono Industrial Les Guixeres

C/ Xarol 8 C

08915 BADALONA-SPAIN

Tel : +34 - 93 339 47 58

Fax : +34 - 93 490 31 45

E-mail : [dtl@ditel.es](mailto:dtl@ditel.es)

[www.ditel.es](http://www.ditel.es)