

# KOSMOS SERIES

CE

## MODBUS MAP ADDRESSES



# 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	TemplInput	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
	13	Input 2 [5]	Digit 4
7	14		Digit 3
	15		Digit 2
8	16		Digit 1
	17		Digit 0
9	18	Input 3 [5]	Digit 4
	19		Digit 3
10	20		Digit 2
	21		Digit 1
11	22		Digit 0

	23	Input 4 [5]	Digit 4
12	24		Digit 3
	25		Digit 2
13	26		Digit 1
	27		Digit 0
14	28	Input 5 [5]	Digit 4
	29		Digit 3
15	30		Digit 2
	31		Digit 1
16	32		Digit 0
	33	Input 6 [5]	Digit 4
17	34		Digit 3
	35		Digit 2
18	36		Digit 1
	37		Digit 0
19	38	Input 7 [5]	Digit 4
	39		Digit 3
20	40		Digit 2
	41		Digit 1
21	42		Digit 0
	43	Input 8 [5]	Digit 4
22	44		Digit 3
	45		Digit 2
23	46		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	Display 4 [5]	Digit 1
	77		Digit 0
39	78		Digit 4
	79		Digit 3
40	80		Digit 2
	81	Display 5 [5]	Digit 1
41	82		Digit 0
	83		Digit 4
42	84		Digit 3
	85		Digit 2
43	86	Display 6 [5]	Digit 1
	87		Digit 0
44	88		Digit 4
	89		Digit 3
45	90		Digit 2
	91	Display 7 [5]	Digit 1
46	92		Digit 0
	93		Digit 4
47	94		Digit 3
	95		Digit 2
48	96	Display 8 [5]	Digit 1
	97		Digit 0
49	98		Digit 4
	99		Digit 3
50	100		Digit 2
	101	Display 9 [5]	Digit 1
51	102		Digit 0
	103		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		Digit 0
	113	Display 11 [5]	Digit 4
57	114		Digit 3
	115		Digit 2
58	116		Digit 1
	117		Digit 0
59	118	DecimalPoint	<b>0=99999, 1=9999.9, 2=999.99, 3=99.999, 4=9.9999</b>
	119	OffsetTemp [3]	Digit 2
60	120		Digit 1
	121		Digit 0
61	122	FilterP	0 to 9
	123	reserved	
62	124	Round	<b>0=01, 1=02, 2=05, 3=10</b>
	125	Input Error Limit	<b>0=NO, 1=YES</b>
63	126	Tare Mode	<b>0=Tare1, 1=Tare2, 2=Tare3</b>
	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=Amber, 1=Red, 2=Green</b>
	133	Mode PROG Color	<b>0=Amber, 1=Red, 2=Green</b>
67	134	Brightness	<b>0=HI, 1=LO</b>
	135	ECO Mode	<b>0=OFF, 1=ON</b>
68	136	ECO Mode Minutes [2]	Digit 1
	137	(00 to 99 min)	Digit 0
69	138	Setpoint 1 Value [5]	Digit 4
	139		Digit 3
70	140		Digit 2
	141		Digit 1
71	142		Digit 0
	143		Digit 4
72	144	Setpoint 2 Value [5]	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
	163	Setpoint 2 Delay/Hysteresis [5]	Digit 4 (if Hysteresis)
82	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	Setpoint 4 Delay/Hysteresis [5]	Digit 4 (if Hysteresis)
87	174		Digit 3 (if Hysteresis)
	175		Digit 2 (if Hysteresis)
88	176		Digit 1
	177		Digit 0
89	178	reserved	
	179		
90	180	reserved	
	181		
91	182	reserved	
	183		

92	184	reserved	
	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	<b>0=Net, 1=Gross</b>
	205	Setpoint 4 Comparison Value	<b>0=Net, 1=Gross</b>
103	206	Setpoint 1 Color	<b>0&gt;No Change, 1=Amber, 2=Red, 3=Green</b>
	207	Setpoint 2 Color	<b>0&gt;No Change, 1=Amber, 2=Red, 3=Green</b>
104	208	Setpoint 3 Color	<b>0&gt;No Change, 1=Amber, 2=Red, 3=Green</b>
	209	Setpoint 4 Color	<b>0&gt;No Change, 1=Amber, 2=Red, 3=Green</b>
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		Digit 1
	223		Digit 0

112	224	<i>reserved</i>	
	225	On Error Analogue Output	<b>0=HI, 1=LO</b>
113	226	Locking code [4]	Digit 3
	227		Digit 2
	228		Digit 1
	229		Digit 0
114	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 : 1 : 2 : ...
117	234	Logic Function IN 2	
	235	Logic Function IN 3	

## Programming Data (Read Only)

118	236	IP adress 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=1200, 1=2400, 2=4800, 3=9600, 4=19200</b>
	243	Protocol RS232/485	<b>0=ASCII, 1=ISO1745, 2=Modbus RTU</b>
122	244	Delay Response RS485	<b>0=No, 1=30ms, 2=60ms, 3=120ms, 4=250ms</b>
	245	reserved	

## 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=99999, 1=9999.9, 2=999.99, 3=99.999, 4=9.9999</b>
	271	Input Decimal Point	<b>0=99999, 1=9999.9, 2=999.99, 3=99.999, 4=9.9999</b>
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= "+", 1= "-"</b>
	289	Overflow Display Sign (actual or last)	<b>0= "+", 1= "-"</b>
145	290	Overflow Input	<b>0= NO, 1= Yes</b>
	291	Overflow Display	<b>0= NO, 1= Yes</b>

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	reserved	
	309	reserved	
155	310	reserved	
	311	reserved	
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	0=Amber, 1=Red, 2=Green
	317	Actual Display Brightness	0=HI, 1=LO
159	318	Sensor Break Error	0= NO, 1=Yes
	319	Input Limit Error	0= NO, 1=Yes

160	320	installed Options	
	321	reserved	
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		
	2275		
1146	2276	Setpoint 1 Value ( Long Format)	Not saved in memory
	2277		
1147	2278		
	2279		
1148	2280	Setpoint 2 Value ( Long Format)	Not saved in memory
	2281	Cal_Pointer	
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 Green. Not saved in memory Sample of frame in hexadecimal for unit n° 1 : 01 05 63 33 FF 00 62 71