



# OI-7480-12 Modbus Register Map

Register Address (Hexadecimal)	Register Address (Decimal)	Data Description	R/W	Length (In Bits)	Units	Valid Response
<b>Radio Data</b>						
1	1	Channel 1 Port Number	R	16	INTEGER	1
2	2	Channel 2 Port Number	R	16	INTEGER	2
3	3	Channel 3 Port Number	R	16	INTEGER	3
4	4	Channel 4 Port Number	R	16	INTEGER	4
5	5	Channel 5 Port Number	R	16	INTEGER	5
6	6	Channel 6 Port Number	R	16	INTEGER	6
7	7	Channel 7 Port Number	R	16	INTEGER	7
8	8	Channel 8 Port Number	R	16	INTEGER	8
9	9	Channel 9 Port Number	R	16	INTEGER	9
A	10	Channel 10 Port Number	R	16	INTEGER	10
B	11	Channel 11 Port Number	R	16	INTEGER	11
C	12	Channel 12 Port Number	R	16	INTEGER	12
D	13	Channel 1 Reading	R	32	FLOAT	Any valid sensor reading
F	15	Channel 2 Reading	R	32	FLOAT	Any valid sensor reading
11	17	Channel 3 Reading	R	32	FLOAT	Any valid sensor reading
13	19	Channel 4 Reading	R	32	FLOAT	Any valid sensor reading
15	21	Channel 5 Reading	R	32	FLOAT	Any valid sensor reading
17	23	Channel 6 Reading	R	32	FLOAT	Any valid sensor reading
19	25	Channel 7 Reading	R	32	FLOAT	Any valid sensor reading
1B	27	Channel 8 Reading	R	32	FLOAT	Any valid sensor reading
1D	29	Channel 9 Reading	R	32	FLOAT	Any valid sensor reading
1F	31	Channel 10 Reading	R	32	FLOAT	Any valid sensor reading
21	33	Channel 11 Reading	R	32	FLOAT	Any valid sensor reading
23	35	Channel 12 Reading	R	32	FLOAT	Any valid sensor reading
25	37	Channel 1 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
26	38	Channel 2 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
27	39	Channel 3 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
28	40	Channel 4 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
29	41	Channel 5 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
2A	42	Channel 6 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
2B	43	Channel 7 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode

2C	44	Channel 8 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
2D	45	Channel 9 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
2E	46	Channel 10 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
2F	47	Channel 11 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
30	48	Channel 12 Mode	R	16	ENUMERATION	0-2 . 0 is in normal mode, 1 is any other mode, 2 is cal mode
31	49	Channel 1 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
33	51	Channel 2 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
35	53	Channel 3 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
37	55	Channel 4 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
39	57	Channel 5 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
3B	59	Channel 6 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
3D	61	Channel 7 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
3F	63	Channel 8 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
41	65	Channel 9 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
43	67	Channel 10 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
45	69	Channel 11 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
47	71	Channel 12 Power	R	32	FLOAT	0. The 4-20 Sensors do not send the power reading.
49	73	Channel 1 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
4A	74	Channel 2 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
4B	75	Channel 3 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
4C	76	Channel 4 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
4D	77	Channel 5 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
4E	78	Channel 6 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
4F	79	Channel 7 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
50	80	Channel 8 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
51	81	Channel 9 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
52	82	Channel 10 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
53	83	Channel 11 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
54	84	Channel 12 Sensor Type	R	16	ENUMERATION	0. The 4-20 Sensors do not send the Sensor Type.
55	85	Channel 1 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
56	86	Channel 2 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
57	87	Channel 3 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
58	88	Channel 4 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
59	89	Channel 5 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
5A	90	Channel 6 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
5B	91	Channel 7 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
5C	92	Channel 8 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
5D	93	Channel 9 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
5E	94	Channel 10 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below

5F	95	Channel 11 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
60	96	Channel 12 Gas Type	R/W	16	ENUMERATION	0-127 See Gas Enumeration below
61	97	Channel 1 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
62	98	Channel 2 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
63	99	Channel 3 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
64	100	Channel 4 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
65	101	Channel 5 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
66	102	Channel 6 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
67	103	Channel 7 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
68	104	Channel 8 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
69	105	Channel 9 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
6A	106	Channel 10 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
6B	107	Channel 11 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
6C	108	Channel 12 Fault	R	16	ENUMERATION	0 or 13. The 4-20 Sensors do not send what type of Fault
6D	109	Channel 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
6E	110	Channel 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
6F	111	Channel 3 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
70	112	Channel 4 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
71	113	Channel 5 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
72	114	Channel 6 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
73	115	Channel 7 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
74	116	Channel 8 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
75	117	Channel 9 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
76	118	Channel 10 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
77	119	Channel 11 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
78	120	Channel 12 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
79	121	Channel 1 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
7A	122	Channel 2 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
7B	123	Channel 3 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
7C	124	Channel 4 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
7D	125	Channel 5 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
7E	126	Channel 6 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
7F	127	Channel 7 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
80	128	Channel 8 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
81	129	Channel 9 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
82	130	Channel 10 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
83	131	Channel 11 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
84	132	Channel 12 Relay 1 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
85	133	Channel 1 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high

86	134	Channel 2 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
87	135	Channel 3 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
88	136	Channel 4 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
89	137	Channel 5 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
8A	138	Channel 6 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
8B	139	Channel 7 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
8C	140	Channel 8 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
8D	141	Channel 9 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
8E	142	Channel 10 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
8F	143	Channel 11 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
90	144	Channel 12 Relay 1 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
91	145	Channel 1 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
93	147	Channel 2 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
95	149	Channel 3 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
97	151	Channel 4 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
99	153	Channel 5 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
9B	155	Channel 6 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
9D	157	Channel 7 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
9F	159	Channel 8 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
A1	161	Channel 9 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
A3	163	Channel 10 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
A5	165	Channel 11 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
A7	167	Channel 12 Relay 1 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
A9	169	Channel 1 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
AA	170	Channel 2 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
AB	171	Channel 3 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
AC	172	Channel 4 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
AD	173	Channel 5 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
AE	174	Channel 6 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
AF	175	Channel 7 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
B0	176	Channel 8 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
B1	177	Channel 9 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
B2	178	Channel 10 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
B3	179	Channel 11 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
B4	180	Channel 12 Relay 1 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
B5	181	Channel 1 Relay 2 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
B6	182	Channel 2 Relay 2 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
B7	183	Channel 3 Relay 2 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
B8	184	Channel 4 Relay 2 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on

B9	185	Channel 5 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
BA	186	Channel 6 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
BB	187	Channel 7 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
BC	188	Channel 8 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
BD	189	Channel 9 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
BE	190	Channel 10 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
BF	191	Channel 11 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
C0	192	Channel 12 Relay 2 On/Off	R/W	16	ENUMERATION	0 – 1, 0 means off, 1 means on
C1	193	Channel 1 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C2	194	Channel 2 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C3	195	Channel 3 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C4	196	Channel 4 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C5	197	Channel 5 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C6	198	Channel 6 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C7	199	Channel 7 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C8	200	Channel 8 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
C9	201	Channel 9 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
CA	202	Channel 10 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
CB	203	Channel 11 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
CC	204	Channel 12 Relay 2 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
CD	205	Channel 1 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
CF	207	Channel 2 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
D1	209	Channel 3 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
D3	211	Channel 4 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
D5	213	Channel 5 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
D7	215	Channel 6 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
D9	217	Channel 7 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
DB	219	Channel 8 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
DD	221	Channel 9 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
DF	223	Channel 10 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
E1	225	Channel 11 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
E3	227	Channel 12 Relay 2 Set Point	R/W	32	FLOAT	Float < 2000.When writing it needs to be less than the scale.
E5	229	Channel 1 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
E6	230	Channel 2 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
E7	231	Channel 3 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
E8	232	Channel 4 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
E9	233	Channel 5 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
EA	234	Channel 6 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
EB	235	Channel 7 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch

EC	236	Channel 8 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
ED	237	Channel 9 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
EE	238	Channel 10 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
EF	239	Channel 11 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
F0	240	Channel 12 Relay 2 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
F1	241	Channel 1 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F2	242	Channel 2 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F3	243	Channel 3 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F4	244	Channel 4 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F5	245	Channel 5 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F6	246	Channel 6 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F7	247	Channel 7 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F8	248	Channel 8 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
F9	249	Channel 9 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
FA	250	Channel 10 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
FB	251	Channel 11 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
FC	252	Channel 12 Relay 3 On/Off	R/W	16	ENUMERATION	0 - 1, 0 means off, 1 means on
FD	253	Channel 1 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
FE	254	Channel 2 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
FF	255	Channel 3 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
100	256	Channel 4 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
101	257	Channel 5 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
102	258	Channel 6 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
103	259	Channel 7 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
104	260	Channel 8 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
105	261	Channel 9 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
106	262	Channel 10 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
107	263	Channel 11 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
108	264	Channel 12 Relay 3 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
109	265	Channel 1 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
10B	267	Channel 2 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
10D	269	Channel 3 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
10F	271	Channel 4 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
111	273	Channel 5 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
113	275	Channel 6 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
115	277	Channel 7 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
117	279	Channel 8 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
119	281	Channel 9 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
11B	283	Channel 10 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.

11D	285	Channel 11 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
11F	287	Channel 12 Relay 3 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
121	289	Channel 1 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
122	290	Channel 2 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
123	291	Channel 3 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
124	292	Channel 4 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
125	293	Channel 5 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
126	294	Channel 6 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
127	295	Channel 7 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
128	296	Channel 8 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
129	297	Channel 9 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
12A	298	Channel 10 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
12B	299	Channel 11 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
12C	300	Channel 12 Relay 3 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
12D	301	Channel 1 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
12E	302	Channel 2 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
12F	303	Channel 3 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
130	304	Channel 4 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
131	305	Channel 5 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
132	306	Channel 6 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
133	307	Channel 7 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
134	308	Channel 8 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
135	309	Channel 9 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
136	310	Channel 10 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
137	311	Channel 11 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
138	312	Channel 12 Relay 4 On/Off	R/W	16	ENUMERATION	0 - 1 ,0 means off, 1 means on
139	313	Channel 1 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
13A	314	Channel 2 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
13B	315	Channel 3 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
13C	316	Channel 4 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
13D	317	Channel 5 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
13E	318	Channel 6 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
13F	319	Channel 7 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
140	320	Channel 8 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
141	321	Channel 9 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
142	322	Channel 10 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
143	323	Channel 11 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
144	324	Channel 12 Relay 4 High/Low	R/W	16	ENUMERATION	0 - 1 ,0 means low, 1 means high
145	325	Channel 1 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.

147	327	Channel 2 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
149	329	Channel 3 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
14B	331	Channel 4 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
14D	333	Channel 5 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
14F	335	Channel 6 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
151	337	Channel 7 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
153	339	Channel 8 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
155	341	Channel 9 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
157	343	Channel 10 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
159	345	Channel 11 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
15B	347	Channel 12 Relay 4 Set Point	R/W	32	FLOAT	Float < 2000. When writing it needs to be less than the scale.
15D	349	Channel 1 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
15E	350	Channel 2 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
15F	351	Channel 3 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
160	352	Channel 4 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
161	353	Channel 5 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
162	354	Channel 6 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
163	355	Channel 7 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
164	356	Channel 8 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
165	357	Channel 9 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
166	358	Channel 10 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
167	359	Channel 11 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
168	360	Channel 12 Relay 4 Latch/Unlatch	R/W	16	ENUMERATION	0 - 1 ,0 means unlatch, 1 means latch
169	361	Channel 1 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
16A	362	Channel 2 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
16B	363	Channel 3 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
16C	364	Channel 4 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
16D	365	Channel 5 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
16E	366	Channel 6 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
16F	367	Channel 7 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
170	368	Channel 8 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
171	369	Channel 9 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
172	370	Channel 10 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
173	371	Channel 11 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
174	372	Channel 12 Max Scale	R/W	16	INTEGER	0-2000. This is the scale of the sensor on this channel.
175	373	Channel 1 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
176	374	Channel 2 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
177	375	Channel 3 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
178	376	Channel 4 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.



179	377	Channel 5 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
17A	378	Channel 6 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
17B	379	Channel 7 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
17C	380	Channel 8 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
17D	381	Channel 9 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
17E	382	Channel 10 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
17F	383	Channel 11 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
180	384	Channel 12 Min Scale	R/W	16	INTEGER	-70-0. This is the bottom value of the scale.
<b>Modbus and Build Data</b>						
1771	6001	Modbus Address	R/W	16	INTEGER	1 – 247
1772	6002	Modbus Baud Rate	R/W	16	INTEGER	Valid Baud Rate. See below.
1773	6003	Month	R	16	INTEGER	1 – 12
1774	6004	Day	R	16	INTEGER	1 – 31
1775	6005	Year	R	16	INTEGER	2009 –
1776	6006	Serial Number Character	R	16	ENUMERATION	13 This is for the Letter “M” in the serial number.
1777	6007	Serial Number	R	32	LONG INT	1 – 99999
<b>Settings in Startup Menu</b>						
177C	6012	Relay 4 as Fault Relay	R	16	ENUMERATION	0 – 1, 0 means normal relay, 1 means Fault Relay
177D	6013	Relay 1 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
177E	6014	Relay 2 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
177F	6015	Relay 3 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
1780	6016	Relay 4 Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
1781	6017	Fault Terminal Fail Safe	R	16	ENUMERATION	0 – 1, 0 means not Fail Safe, 1 means Fail Safe
<b>Diagnostics Data</b>						
2704	9988	Reset	R/W	16	INTEGER	0, 1. If user sets to 1, resets the unit.
2705	9989	Serial Receive Good Count	R	16	UINT	0 – 65535
2706	9990	Serial Receive Error Count	R	16	UINT	0 – 65535
2707	9991	Serial Transmit Good Count	R	16	UINT	0 – 65535
2708	9992	Serial Transmit Error Count	R	16	UINT	0 – 65535
2709	9993	Radio Receive Good Count	R	16	UINT	0 – 65535
270A	9994	Radio Receive Error Count	R	16	UINT	0 – 65535
270B	9995	Radio Transmit Good Count	R	16	UINT	0 – 65535
270C	9996	Radio Transmit Error Count	R	16	UINT	0 – 65535
270D	9997	Uptime Days	R	16	UINT	0 – 65535
270E	9998	Uptime Hours	R	16	UINT	0 – 65535
270F	9999	Uptime Minutes	R	16	UINT	0 – 65535

MODE SENSOR	MODE
0	NORMAL

Valid Baud Rates
4800

1	NULL
2	CALIBRATION
3	RELAY
4	Radio ADD
5	Diagnostic/Batt
6	Advanced Menu
7	Admin Menu

Serial Number Char	Char
1	A
2	B
3	C
4	D
5	E
6	F
7	G
8	H
9	I
10	J
11	K
12	L
13	M
14	N
15	O
16	P
17	Q
18	R
19	S
20	T
21	U
22	V
23	W
24	X
25	Y
26	Z
27	AA
28	AB
29	AC

9600
19200

FAULT	FAULT
0	NONE
1	N/A
2	Future Error
3	Future Error
4	N/A
5	N/A
6	N/A
7	Future Error
8	N/A
9	N/A
10	When Sensor is wired, it means no sensor is connected
11	Future Error
12	Future Error
13	Unspecified Error on sensor unit. Shown only on Monitor
14	N/A
15	Monitor Fault

SENSOR TYPE NUM	SENSOR
0	EC
1	IR
2	CB
3	MOS
4	PID
5	TANK
6	4-20
7	SWITCH
8	Unknown
30	WF190
31	None Selected

GAS TYPE NUM	GAS
0	H2S
1	SO2
2	O2

30	AD
31	AE
32	AF
33	AG
34	AH
35	AI
36	AJ
37	AK
38	AL
39	AM
40	AN
41	AO
42	AP
43	AQ
44	AR
45	AS
46	AT
47	AU
48	AV
49	AW
50	AX
51	AY
52	AZ

3	CO
4	CL2
5	CO2
6	LEL
7	VOC
8	FEET
9	HCl
10	NH3
11	H2
12	ClO2
13	HCN
14	F2
15	HF
16	CH2O
17	NO2
18	O3
19	INCHES
20	4-20
21	Not Specified
22	C°
23	F°
24..N	Future Gases