



Neptune EMX Bacnet and Modbus Supplement

Bacnet List Variables

Analog Inputs

ID	TYPE	NAME	R/W	UNIT
0	AI	Temperature	R	F
1	AI	Feedback	R	%

Analog Values

ID	TYPE	NAME	R/W	UNIT
0	AV	Scale	R/W	0-1
1	AV	Setpoint	R/W	F
2	AV	P-band	R/W	F
3	AV	I-time	R/W	sec
4	AV	DZ activation	R/W	%
5	AV	DZ band	R/W	F
6	AV	Feedback range	R/W	0-1
7	AV	Output range	R/W	0-1
8	AV	Direct acting output	R/W	0-1
9	AV	Actuator run time	R/W	0-4
10	AV	High limit	R/W	F
11	AV	High limit delay	R/W	sec

Analog Outputs

ID	TYPE	NAME	R/W	UNIT
0	AO	Output Signal	R	%

Binary Values

ID	TYPE	NAME	R/W
0	BV	Sensor Error	R
1	BV	High temp alarm	R
2	BV	Alarm reset	W

Modbus List Variables

Holding Registers

ID	R/W	NAME	UNIT	DEFAULT	MIN	MAX	NOTES
4x0001	R	Program Version					Major Version
4x0002	R	Program Version					Minor Version
4x0003	R	Unit address		1	1	247	
4x0004	R	Temperature	F				
4x0005	R	Output signal	%		0	100	
4x0006	R	Feedback	%		0	100	
4x0007	R	Sensor Error	0-1		0	1	0=OK, 1=Open or shorted sensor
4x0008	R	High temp alarm	0-1		0	1	0=No alarm, 1=Alarm
4x0009	R/W	Scale	0-1	0	0	1	0=Fahrenheit, 1=Celsius
4x0010	R/W	Setpoint	F	120	40	205	
4x0011	R/W	P-band	F	50	9	360	
4x0012	R/W	I-time	secs	12	0	480	
4x0013	R/W	DZ activation	%	10	9	100	9=OFF, not using dead zone
4x0014	R/W	DZ band	F	4	12	4	
4x0015	R/W	Feedback range	0-1	1	0	1	0=0-10V, 1=2-10V
4x0016	R/W	Output range	0-1	0	0	1	0=0-10V, 1=2-10V
4x0017	R/W	Action	0-1	0	0	0	0=Forward, 1=Reverse
4x0018	R/W	Actuator run time	0-4	1	0	4	0=15s, 1=25s, 2=60s, 3=120s, 4=180s
4x0019	R/W	High limit	F	39	39	205	39=OFF
4x0020	R/W	High limit delay	secs	10	3	300	
4x0021	R/W	Alarm Reset	1				Write 1 to reset alarm
4x0049	R/W	Auto Discovery	1499				Always returns the value 1499