BACnet Point Mapping

The following tables provide a list of the endicator™ data points that are mapped to the BACnet network. All Analog Input object types are read-only.

Table 1: List of BACnet Analog Input Objects

Object Type	Object Instance	Description	Units	Notes
AI	1	Serial Number		
AI	2	Firmware Version		
AI	3	Auto/Manual Wiring Configuration		0 = Volt-amp matching and CT polarities were manually configured. 1 = Volt-amp matching and CT polarities were auto-configured.
AI	4	Total KW	KW	
AI	5	Sliding Window KW	KW	
AI	6	Total KVAR	KVAR	
AI	7	Total KVA	KVA	
AI	8	Phase A KW	KW	
AI	9	Phase B KW	KW	
AI	10	Phase C KW	KW	
AI	11	Phase A KVAR	KVAR	
AI	12	Phase B KVAR	KVAR	
AI	13	Phase C KVAR	KVAR	
AI	14	Phase A KVA	KVA	
AI	15	Phase B KVA	KVA	
AI	16	Phase C KVA	KVA	
AI	17	Total Power Factor	P.F.	
AI	18	Phase A Power Factor	P.F.	
AI	19	Phase B Power Factor	P.F.	
AI	20	Phase C Power Factor	P.F.	
AI	21	Average LL Volts	VOLTS	
AI	22	Average LN Volts	VOLTS	
AI	23	L1-L2 Volts	VOLTS	
AI	24	L2-L3 Volts	VOLTS	
AI	25	L3-L1 Volts	VOLTS	
AI	26	L1-N Volts	VOLTS	
AI	27	L2-N Volts	VOLTS	
AI	28	L3-N Volts	VOLTS	
AI	29	Average Amps	AMPS	
AI	30	Phase A Amps	AMPS	
AI	31	Phase B Amps	AMPS	
AI	32	Phase C Amps	AMPS	
AI	33	Total Pos KWH	KWH	
AI	34	Total Neg KWH	KWH	
AI	35	Total Abs KWH	KWH	
AI	36	Total Net KWH	KWH	
AI	37	Total Pos KVARH	KVARH	
AI	38	Total Neg KVARH	KVARH	
AI	39	Total Abs KVARH	KVARH	
AI	40	Total Net KVARH	KVARH	
AI	41	Total KVAH	KVAH	
AI	42	Phase A Pos KWH	KWH	
AI	43	Phase B Pos KWH	KWH	
AI	44	Phase C Pos KWH	KWH	

Object Type	Object Instance	Description	Units	Notes
AI	45	Phase A Neg KWH	KWH	
AI	46	Phase B Neg KWH	KWH	
AI	47	Phase C Neg KWH	KWH	
AI	48	Phase A Pos KVARH	KVARH	
AI	49	Phase B Pos KVARH	KVARH	
AI	50	Phase C Pos KVARH	KVARH	
AI	51	Phase A Neg KVARH	KVARH	
AI	52	Phase B Neg KVARH	KVARH	
AI	53	Phase C Neg KVARH	KVARH	
AI	54	Phase A Pos KVAH	KVAH	
AI	55	Phase B Pos KVAH	KVAH	
AI	56	Phase C Pos KVAH	KVAH	
AI	57	Peak Sliding Window KW	KW	
AI	58	Frequency	HZ	
AI	59	Clear Totalizers Year		
AI	60	Clear Totalizers Day Month		Least significant byte = Day (1 – 31) Next byte = Month (1 – 12)
AI	61	Clear Totalizers Time		Least significant byte = Minutes (0 – 59) Next byte = Hours (0 – 23)
AI	62	Peak Window KW Year		
AI	63	Peak Window KW Day Month		Least significant byte = Day (1 – 31) Next byte = Month (1 – 12)
AI	64	Peak Window KW Time		Least significant byte = Minutes (0 – 59) Next byte = Hours (0 – 23)
AI	65	Clear Peak KW Year		
AI	66	Clear Peak KW Day Month		Least significant byte = Day (1 – 31) Next byte = Month (1 – 12)
AI	67	Clear Peak KW Time		Least significant byte = Minutes (0 – 59) Next byte = Hours (0 – 23)

Table 2: List of BACnet Analog Value Objects

Object Type	Object Instance	Description	Units	Notes
AV	1	Power System Type		0 = 3-Wire Delta 1 = 4-Wire Wye 2 = 2-Wire Single Phase 3 = 3-Wire Single Phase 4 = 4-Wire Delta
AV	2	Full Scale Volts	VOLTS	Range 120 – 32000
AV	3	Full Scale Amps	AMPS	Range 5 – 6000
AV	4	CT Type		0 = Safe-CTs non-matched 1 = 5A CTs non-matched 2 = Safe-CTs matched set 3 = 5A CTs matched set
AV	5	'A' Phase Cal Number		Range 9500 – 10500
AV	6	'B' Phase Cal Number		Range 9500 – 10500
AV	7	'C' Phase Cal Number		Range 9500 – 10500
AV	8	Volt-Amp Pairing		0 = L1/CTA L2/CTB L3/CTC (normal) 1 = L1/CTB L2/CTA L3/CTC 2 = L1/CTA L2/CTC L3/CTB 3 = L1/CTC L2/CTB L3/CTA 4 = L1/CTC L2/CTA L3/CTB 5 = L1/CTB L2/CTC L3/CTA
AV	9	CTA Polarity		0 = Normal 1 = Reversed
AV	10	CTB Polarity		0 = Normal 1 = Reversed
AV	11	CTC Polarity		0 = Normal 1 = Reversed
AV	12	KW Sliding Window Period	MINUTES	Range 5 – 60
AV	13	Contact 1 Function		0 = Positive KWH pulse 1 = Negative KWH pulse 2 = Low Volts alarm N.O 3 = Low Volts alarm N.C. 4 = Unbalanced Volts alarm N.O. 5 = Unbalanced Volts alarm N.C. 6 = Low OR Unbal Volts alarm N.O. 7 = Low OR Unbal Volts alarm N.C.
AV	14	Contact 2 Function		0 = Positive KWH pulse 1 = Negative KWH pulse 2 = Low Volts alarm N.O 3 = Low Volts alarm N.C. 4 = Unbalanced Volts alarm N.O. 5 = Unbalanced Volts alarm N.C. 6 = Low OR Unbal Volts alarm N.O. 7 = Low OR Unbal Volts alarm N.C.
AV	15	Minimum KWH Pulse Width	MILLISECONDS	Range 50 – 2000, 50 ms increments
AV	16	KWH Per Puls	KWH	0 = 0.01 KWH/pulse 1 = 0.1 KWH/pulse 2 = 1 KWH/pulse 3 = 10 KWH/pulse
AV	17	Low Volts Alarm Threshold	PERCENT	Range 0 – 99 (0 = alarm disabled)
AV	18	Unbalanced Volts Alarm Threshold	PERCENT	Range 0 – 99 (0 = alarm disabled)

Object Type	Object Instance	Description	Units	Notes
AV	19	mA Output Function		0 = Total Positive KW 1 = Total Bidirectional KW 2 = Sliding Window KW 3 = Peak Window KW 4 = Total KVA 5 = Total Power Factor 6 = Average amps 7 = Average volts
AV	20	Name Tag Part 1		Least significant byte = First ASCII character Next significant byte = Next ASCII character
AV	21	Name Tag Part 2		Least significant byte = First ASCII character Next significant byte = Next ASCII character
AV	22	Name Tag Part 3		Least significant byte = First ASCII character Next significant byte = Next ASCII character
AV	23	Name Tag Part 4		Least significant byte = First ASCII character Next significant byte = Next ASCII character
AV	24	Name Tag Part 5		Least significant byte = First ASCII character Next significant byte = Next ASCII character
AV	25	Name Tag Part 6		Least significant byte = First ASCII character Next significant byte = Next ASCII character
AV	26	Displayed Values 1		Each bit is a flag for that data item to be displayed. Bit = 0 means do not display, bit = 1 means display Total KW (Bit 0) Sliding Window KW (Bit 1) Total KVAR (Bit 2) Total KVA (Bit 3) Phase A KW (Bit 4) Phase B KW (Bit 5) Phase C KW (Bit 6) Phase A KVAR (Bit 7) Phase B KVAR (Bit 8) Phase C KVAR (Bit 9) Phase A KVA (Bit 10) Phase B KVA (Bit 11) Phase C KVA (Bit 12) Total Power Factor (Bit 13) Phase A Power Factor (Bit 14) Phase B Power Factor (Bit 15)

Object Type	Object Instance	Description	Units	Notes
AV	27	Displayed Values 2		Each bit is a flag for that data item to be displayed. Bit = 0 means do not display, bit = 1 means display Phase C Power Factor (Bit 0) Average LL Volts (Bit 1) Average LN Volts (Bit 2) L1-L2 Volts (Bit 3) L2-L3 Volts (Bit 4) L3-L1 Volts (Bit 5) L1-N Volts (Bit 6) L2-N Volts (Bit 7) L3-N Volts (Bit 8) Average Amps (Bit 9) A Amps (Bit 10) B Amps (Bit 11) C Amps (Bit 12) Total Positive KWH (Bit 13) Total Negative KWH (Bit 14) Total Absolute KWH (Pos + Neg) (Bit 15)
AV	28	Displayed Values 3		Each bit is a flag for that data item to be displayed. Bit = 0 means do not display, bit = 1 means display Total Net KWH (Pos – Neg) (Bit 0) Total Positive KVARH (Bit 1) Total Negative KVARH (Bit 2) Total KVARH (Pos+Neg) (Bit 3) Net KVARH (Pos-Neg) (Bit 4) Total KVAH (Bit 5) A Positive KWH (Bit 6) B Posiitive KWH (Bit 7) C Positive KWH (Bit 8) A Negative KWH (Bit 9) B Negative KWH (Bit 10) C Negative KWH (Bit 11) A Positive KVARH (Bit 12) B Positive KVARH (Bit 13) C Positive KVARH (Bit 14) A Negative KVARH (Bit 15)
AV	29	Displayed Values 4		Each bit is a flag for that data item to be displayed. Bit = 0 means do not display, bit = 1 means display B Negative KVARH (Bit 0) C Negative KVARH (Bit 1) A KVAH (Bit 2) B KVAH (Bit 3) C KVAH (Bit 4) Peak Sliding Window KW (Bit 6) Frequency (Bit 11) Name Tag (Bit 15)

Object Type	Object Instance	Description	Units	Notes
AV	30	Display Action		0 = No icons, no rotate 1 = Show icons, no rotate 2 = No icons, rotate 3 = Show icons, rotate display
AV	31	Year		
AV	32	Day Month		Least significant byte = Day (1 – 31) Next byte = Month (1 – 12)
AV	33	Time		Least significant byte = Minutes (0 – 59) Next byte = Hours (0 – 23)

Table 3: List of BACnet Analog Output Objects

Object Type	Object Instance	Description	Units	Notes
AO	1	Clear Totalizers		Writing any value will clear the totalizers. This value self-resets to 0 after being written.
AO	2	Clear Peak Sliding Window		Writing any value will clear the peak sliding window. This value self-resets to 0 after being written.

Table 4: List of BACnet Binary Output Objects

Object Type	Object Instance	Description	Units	Notes
BO	1	Clear Totalizers		Setting this active will clear the totalizers. This value self-resets to inactive after being written.
BO	2	Clear Peak Sliding Window		Setting this active will clear the peak sliding window. This value self-resets to inactive after being written.