Available with GENESIS64 Basic SCADA.

Enumerated Data Types in BACnet

The standard enumeration definitions given in the BACnet protocol specification are used and are reproduced here for your convenience.

Enumerated BACnet data types:

BACnetAction:

Value	Action
0	direct
1	reverse

BACnetBinaryPV:

Value	Binary Present Value
0	inactive
1	active

BACnetDeviceStatus:

Value	Device Status
0	operational
1	operational-read-only
2	download-required
3	download-in-progress
4	non-operational
5	backup-in-progress

BACnetEngineeringUnits:

AREA

Value	Unit
0	square-meters
116	square-centimeters
1	square-feet
115	square-inches

CURRENCY

Value	Unit
105	currency1
106	currency2
107	currency3
108	currency4
109	currency5
110	currency6
111	currency7
112	currency8
113	currency9
114	currency10

ELECTRICAL

Value	Unit
2	milliamperes

3	amperes
4	ohms
122	kilohms
123	megohms
5	volts
124	millivolts
6	kilovolts
7	megavolts
8	volt-amperes
9	kilovolt-amperes
10	megavolt-amperes
11	volt-amperes-reactive
12	kilovolt-amperes-reactive
13	megavolt-amperes-reactive
14	degrees-phase
15	power-factor

ENERGY

Value	Unit
16	joules
17	kilojoules
125	kilojoules-per-kilogram
126	megajoules
18	watt-hours
19	kilowatt-hours
20	btus
21	therms
22	ton-hours

ENTHALPY

Value	Unit
23	joules-per-kilogram-dry-air
24	btus-per-pound-dry-air
117	btus-per-pound

ENTROPY

Value	Unit
127	joules-per-degree-Kelvin
128	joules-per-kilogram-degree-Kelvin

FREQUENCY

Value	Unit
25	cycles-per-hour
26	cycles-per-minute
27	hertz
129	kilohertz
130	megahertz
131	per-hour

HUMIDITY

Value	Unit
28	grams-of-water-per-kilogram-dry-air
29	percent-relative-humidity

LENGTH

Value	Unit
30	millimeters
118	centimeters
31	meters
32	inches
33	feet

LIGHT

Value	Unit
34	watts-per-square-foot
35	watts-per-square-meter
36	lumens
37	luxes
38	foot-candles

MASS

Value	Unit
39	kilograms
40	pounds-mass
41	tons

MASS FLOW

Value	Unit
42	kilograms-per-second
43	kilograms-per-minute
44	kilograms-per-hour
119	pounds-mass-per-second
45	pounds-mass-per-minute
46	pounds-mass-per-hour

POWER

Value	Unit
132	milliwatts
47	watts
48	kilowatts
49	megawatts
50	btus-per-hour
51	horsepower
52	tons-refrigeration

PRESSURE

Value	Unit
53	pascals
133	hectopascals
54	kilopascals
134	millibars
55	bars
56	pounds-force-per-square-inch
57	centimeters-of-water
58	inches-of-water
59	millimeters-of-mercury

60	centimeters-of-mercury
61	inches-of-mercury

TEMPERATURE

Value	*Unit*
62	degrees-Celsius
63	degrees-Kelvin
64	degrees-Fahrenheit
65	degrees-days-Celsius
66	degrees-days-Fahrenheit
120	delta-degrees-Fahrenheit
121	delta-degrees-Kelvin

TIME

Value	*Unit*
67	years
68	months
69	weeks
70	days
71	hours
72	minutes
73	seconds

VELOCITY

Value	*Unit*
74	meters-per-second
75	kilometers-per-hour
76	feet-per-second
77	feet-per-minute
78	miles-per-hour

VOLUME

Value	*Unit*
79	cubic-feet
80	cubic-meters
81	imperial-gallons
82	liters
83	us-gallons

VOLUMETRIC FLOW

Value	*Unit*
142	cubic-feet-per-second
84	cubic-feet-per-minute
85	cubic-meters-per-second
135	cubic-meters-per-hour
86	imperial-gallons-per-minute
87	liters-per-second
88	liters-per-minute
136	liters-per-hour
89	us-gallons-per-minute

OTHER

Value	*Unit*

90	degrees-angular
91	degrees-Celsius-per-hour
92	degrees-Celsius-per-minute
93	degrees-Fahrenheit-per-hour
94	degrees-Fahrenheit-per-minute
137	kilowatt-hours-per-square-meter
138	kilowatt-hours-per-square-foot
139	megajoules-per-square-meter
140	megajoules-per-square-foot
95	no-units
96	parts-per-million
97	parts-per-billion
98	percent
143	percent-obscuration-per-foot
144	percent-obscuration-per-meter
99	percent-per-second
100	per-minute
101	per-second
102	psi-per-degree-Fahrenheit
103	radians
104	revolutions-per-minute
141	watts-per-square-meter-degree-Kelvin

BACnetEventType:

Value	Event Type
0	change-of-bitstring
1	change-of-state
2	change-of-value
3	command-failure
4	floating-limit
5	out-of-range
6	complex-event-type
7	buffer-ready
8	change-of-life-safety

BACnetEventState:

Value	Event State
0	normal
1	fault
2	off-normal
3	high-limit
4	low-limit
5	life-safety-alarm

BACnetFileAccessMethod:

Value	Access Method
0	record-access
1	stream-access

BACnetLifeSafetyMode:

Value	Life Safety Mode
0	off

1   on
2   test
3   manned
4   unmanned
5   armed
6   disarmed
7   prearmed
8   slow
9   fast
10   disconnected
11   enabled
12   disabled
13   automatic-release-disabled
14   default

BACnetLifeSafetyOperation:

Value	Life Safety Operation
0	none
1	silence
2	silence-audible
3	silence-visible
4	reset
5	reset-alarm
6	reset-fault

BACnetLifeSafetyState:

Value	Life Safety State
0	quiet
1	pre-alarm
2	alarm
3	fault
4	fault-pre-alarm
5	fault-alarm
6	not-ready
7	active
8	tamper
9	test-alarm
10	test-active
11	test-fault
12	test-fault-alarm
13	holdup
14	duress
15	tamper-alarm
16	abnormal
17	emergency-power
18	delayed
19	blocked
20	local-alarm
21	general-alarm
22	supervisory
23	test-supervisory

BACnetMaintenance:

Value	Maintenance
0	none
1	periodic-test
2	need-service-operational
3	need-service-inoperative

BACnetNotifyType:

Value	Notify Type
0	alarm
1	event
2	ack-notification

BACnetObjectType:

Value	Object Type
0	analog-input
1	analog-output
2	analog-value
3	binary-input
4	binary-output
5	binary-value
6	calendar
7	command
8	device
9	event-enrollment
10	file
11	group
12	loop
13	multi-state-input
14	multi-state-output
15	notification-class
16	program
17	schedule
18	averaging
19	multi-state-value
20	trend-log
21	life-safety-point
22	life-safety-zone

BACnetPolarity:

Value	Polarity
0	normal
1	reverse

BACnetProgramError:

Value	Program Error
0	normal
1	load-failed
2	internal
3	program
4	other

BACnetProgramState:

Value	Program State
0	idle
1	loading
2	running
3	waiting
4	halted
5	unloading

BACnetProgramRequest:

Value	Program Request
0	ready
1	load
2	run
3	halt
4	restart
5	unload

BACnetReliability:

Value	Reliability
0	no-fault-detected
1	no-sensor
2	over-range
3	under-range
4	open-loop
5	shorted-loop
6	no-output
7	unreliable-other
8	process-error
9	multi-state-fault

BACnetSegmentation:

Value	Segmentation
0	segmented-both
1	segmented-transmit
2	segmented-receive
3	no-segmentation

BACnetSilencedState:

Value	Silenced Stage
0	unsilenced
1	audible-silenced
2	visible-silenced
3	all-silenced

BACnetVTClass:

Value	VT Class
0	default-terminal
1	ansi-x3-64
2	dec-vt52
3	dec-vt100
4	dec-vt220
5	hp-700-94
6	ibm-3130

See also:
[Overview of BACnet](#)