

KMC BACnet Controller Product Selection Guide

Models with RTC (Real Time Clock)	BAC-A1616BC	BAC-1xxxx FlexStat	BAC-4xxx AppStat	BAC-58x1	BAC-5831				BAC-7301C	BAC-7302C	BAC-7303C	BAC-7401C		BAC-5050*
Models without RTC		CAN-A1618EIO			BAC-58x2		BAC-7001 BAC-7051	BAC-7003 BAC-7053	BAC-7301	BAC-7302	BAC-7303	BAC-7401	BAC-8x0x	
Description	16 x 16 Building Controller	16 x 8 I/O Expansion Module for BAC-A1616BC	(10 x 9) Controller with Built-In Sensors	(6 x 8) Controller with Built-In Sensors	8 x 8	16 x 12	(4 x 4) VAV	(4 x 4) VAV Fan Induction	4 x 4 AHU	4 x 4 RTU	4 x 4 FCU	4 x 4 HPU	(5 x 8) SimplyVAV Controller-Actuator	Router
BACnet Device Type	B-BC	N/A	B-AAC	B-ASC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-ASC	N/A
Inputs (Analog, Binary, or Accumulator)	16*	16	10 (6 ext., up to 4 int. sensors)*	6 (3 ext., up to 3 int. sensors)*	8	16	4*	4*	4	4	4	4	Up to 5*	N/A
Max. # of Accumulator Objects	16*	16	0	0	3	3	3	3	3	3	3	3	0	N/A
Outputs (Analog or Binary)	16*	8	9 (relays and analog)**	Up to 8 (relays and analog)	8	12	4*	4*	4*	4*	4*	4*	Up to 8*	N/A
Binary Value Objects	100 default, up to 1,000	N/A	100	39	40	40	40	40	40	40	40	40	Up to 15	N/A
Analog Value Objects	100 default, up to 1,000	N/A	100	56	40	40	40	40	40	40	40	40	56	N/A
Multi-state Value Objects	10, up to 256	N/A	40	9	0	0	0	0	0	0	0	0	Up to 6	N/A
PID Loop Objects	16 default, up to 32	N/A	10	4	8	10	4	4	4	4	4	4	Up to 3	N/A
Schedule Objects	10, up to 100	N/A	2	1		8	8	8	8	8	8	8	0	N/A
Calendar Objects	10, up to 32	N/A	1	0	3	3	3	3	3	3	3	3	0	N/A
Event Enrollment Objects	10, up to 512	N/A	10	0	0	0	0	0	0	0	0	0	0	N/A
Program Objects (Control Basic)	32	N/A	10	(5)**	10	0	10	10	10	10	10	10	Up to 4	N/A
Program Size (Each)	25K bytes	N/A	16K bytes	Not user accessible	2.8K bytes	2.8K bytes	2.8K bytes	2.8K bytes	2.8K bytes	2.8K bytes	2.8K bytes	2.8K bytes	Not user accessible	N/A
Tables (User Defined)	16 for inputs, 8 for CB	N/A	No	No	5 for devices/inputs, 3 for Control Basic								No	N/A
Trend Objects	64, up to 256	N/A	8	0	8	8	8	Yes	Yes	8	8	8	0	N/A
Notification Class Objects	10, up to 128	N/A	5	0	8	8	8	8	8	8	8	8	0	N/A
Create and Delete Objects	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	N/A
Segmentation	Yes	N/A	Yes	No	No	No	No	No	No	No	No	No	No	N/A
Passwords	Yes (on Web graphics)	N/A	Yes (in menu)	Yes (in menu)	N/A, part of software								In STE-8x01W80 menu	N/A
Custom Units (D or A)	Yes	Yes	Yes (via TotalControl)	No	No	No	No	No	No	No	No	No	No	N/A
Connections/Ports														
EIA-485 (Terminals)	2 ports	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4 ports
EIA-485 (Modular for NetSensor)	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*	No
Ethernet	Yes	No	Optional	No	No	No	No	No	No	No	No	No	No	Yes
EIA-232 (Terminals)	1 (supported)	No	No	No	No	No	No	No	No	No	No	No	No	2
EIA-232 (9-pin D-sub)	1	No	No	No	No	No	No	No	No	No	No	No	No	1 (shared)
Modem (Through EIA-232 Port)	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Bit Architecture														
Processor	32	32	32	32	16	16	16	16	16	16	16	16	32	32
Input A/D	16	16	12	12	10	10	10	10	10	10	10	10	12	N/A
Output D/A	12	12	8	8	8	8	8	8	8	8	8	8	12	N/A
Pulse Counting	16 Hz	16 Hz	N/A	N/A	16 Hz	16 Hz	16 Hz	16 Hz	16 Hz	16 Hz	16 Hz	16 Hz	N/A	N/A
Other Notes and Comments	*Up to 7 expansion modules (via serial connection) for a total of 128 inputs and 72 outputs; also functions as a router and web server; supports BBMD and much more	Accessed through the BAC-A1616BC	*6 external inputs and 1 integrated temperature sensor are standard; optional integrated sensors include humidity, motion, and CO2 **BAC-1xxx63 = 6 NO relays and 3 analog outputs, BAC-1xxx36 = 3 NO relays and 6 analog outputs	*3 external inputs and 1 integrated temperature sensor are standard; optional integrated sensors include humidity and motion **AppStat is preprogrammed and configurable, but it cannot be user-programmed with custom Control Basic	BAC-584x models have modular input and output connectors		*VAV, 1 input = air flow sensor, 1 output = actuator; 7001/7051 has 3 universal outputs; 7003/7053 has 1 universal, 1 triac, and 1 relay output; actuator stroke per minute: 7001/7003 = 18° 7051/7053 = 60°	*AHU, outputs = 3 universal, 1 triac	*RTU, outputs = 1 universal, 1 triac, 2 staged triacs	*FCU, outputs = 2 universal, 1 triac, 1 staged triac	*HPU, outputs = 4 triacs	*1 input = internal air flow sensor and up to 4 external sensors supported; 1 output = actuator, and up to a combination of 7 (total) triacs and analog outputs; modular connection to STE-8x01W80 or STE-601xW80	*The router's RTC is not involved with system time and is only for troubleshooting; the router routes BACnet traffic, but it is not a BACnet device	

NOTE: Upon power restoration after up to 72 hours of power outage, the RTC in applicable models automatically resets the system time.

NOTE: See individual data sheets as well as the FlexStat Catalog Supplement and Selection Guide (SP-091) for additional product details.

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