

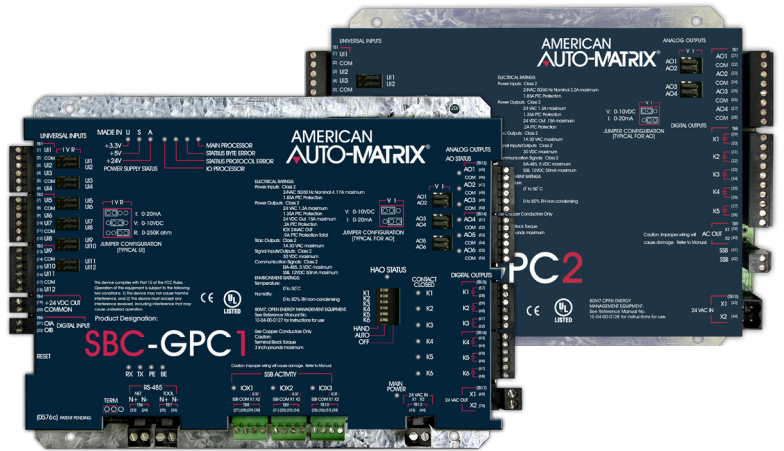
SBC-GPC PUP Advanced Applications Controllers

The SBC-GPC range of controllers offers complete stand-alone control as well as full peer-to-peer capabilities with other devices on the same physical PUP network. GPC devices are fully programmable, networkable, expandable, and designed to provide hardware and software flexibility using onboard I/O and STATbus - AAM's innovative sensor networking technology.

The flexibility of inputs, outputs and programmable capabilities allows the SBC-GPC range to be used in a wide variety of applications, including large built-up air handling units, central plant control, multiple boilers, optimization, pump control, and load shedding algorithms.

FEATURES / OBJECTS

- Fully programmable and flexible
- PUP Network over EIA-485
- Can be used in stand-alone and network applications
- Easy configuration and over-the-network firmware flash updates via SoloPro commissioning environment
- Inputs/Outputs updated up to 10 times per second
- User-defined custom programming capabilities
- Self-diagnostic circuits and LED indicators for device status and troubleshooting
- I/O count can be expanded via STATbus technology
- Thermostatic, PID, and Motor Control Logic Loops for Output Control
- Advanced Math and Logic objects to eliminate complex custom programming
- SPL Program regions provide BASIC-style programming capabilities



STATBUS TECHNOLOGY

The SBC-GPC Range includes STATbus port(s) that can be used to wire a network of up to four (4) digital STAT family devices to sense temperature and/or humidity from single or multiple zones.

Using the GPC's software flexibility, users can perform simple math or logic sequences such as Min/Max/Average to achieve custom sequence applications through local logic, thereby reducing the need to write SPL programs.

FEATURE / OBJECT COMPARISON

	SBC-GPC1	SBC-GPC2
PID Loop	16	16
Thermostatic Loop	24	12
Pulse Pair PID Loop	6	6
Math	8	8
Logic	16	16
Min / Max / Avg	12	12
Enthalpy	4	4
Scaling	12	12
Input Select	12	12
Staging	4	2
Remap	64	64
Broadcast	8	8
Comm Status	1	1
Season	1	1
SPL Program Regions	8	2

I/O COMPARISON

	SBC-GPC1	SBC-GPC2
Universal Inputs 24-bit Resolution Programmed / Jumper Selectable 0 to 5 VDC / 0 to 10 VDC / 0 to 20 mA Binary, Linear, or Thermistor	12	8
Digital Inputs 5 to 29 VDC Opto/Isolator 20 pulses/second	1	1
Digital Outputs 6-30 VAC, 50/60 Hz, 1 Amp Opto-Isolated Triac HAO switch w/ diagnostic feedback Varistor protection	6	5
Analog Outputs 12-bit Resolution 0 to 10 VDC @ 20 mA current 0 to 20 mA jumper selectable	6	4
STATbus Ports	3	1
STATbus Expansion Limits (UI / DI / AO / DO)	12 / 7 / 6 / 6	4*

* Up to 4 Additional STAT inputs (direct digital sensor : STAT1-D, STAT2-D, STAT3, RH1, RH3, RHT)

IOX MODULES

SSB-DI1 1 Digital Input Updated every 100ms, measures pulse width as small as 50 mS
SSB-DO2-1 2 Dry Contact Inputs 2 Digital Outputs (relay) max load up to 10 A up to 250 VAC/DC
SBC-STAT 1 digital temp and/or humidity sensor (STAT1-D, STAT2-D, STAT3, RH1, RH3, RHT)
SSB-IOX2-1 UI = 2, DI = 0, AO = 6, DO = 6

SPECIFICATIONS

Processor	high speed 32-bit processor	Overall Size	(GPC1) 8.2 x 6.5 x 1.0 in (20.8 x 16.5 x 2.5 cm) (GPC2) 6.9 x 5.7 x 1.0 in (17.5 x 14.6 x 2.6 cm)
Terminations	pluggable terminal blocks for inputs, outputs, power, & network connections	Shipping Weight	(GPC1, GPC4) 1.4 lbs (.64 kg) (GPC2) 1.0 lbs (.45 kg)
Wiring	18-22 gauge wire	Mounting	flat surface with screws
Baud Rates	9.6, 19.2, 38.4, 57.6, 76.8, 115.2 kbps	Operating Temp	32 to 122° F (0 to 50° C)
Input Supply	22 to 29 VAC 50/60 Hz @ 4.16A max, PTC protection	Storage Temp	-40 to 151° F (-40 to 66° C)
Transformer	internal isolated switching power supply	Relative Humidity	0 to 90% RH non-condensing
Indicators	LEDs for line power, regulated DC voltages	Agency Listings	UL listed 916, Management Equipment, Energy (PAZX) FCC rules Part 15 Class B computing device Complies with CE directive and standards
Outputs	analog: 0-10 VDC into 1 kOhm load or 0-20 mA into 250 Ohm load digital: 6-30 VAC, 50/60 Hz @ 1A resistive or inductive load digital outputs provide varistor protection		



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