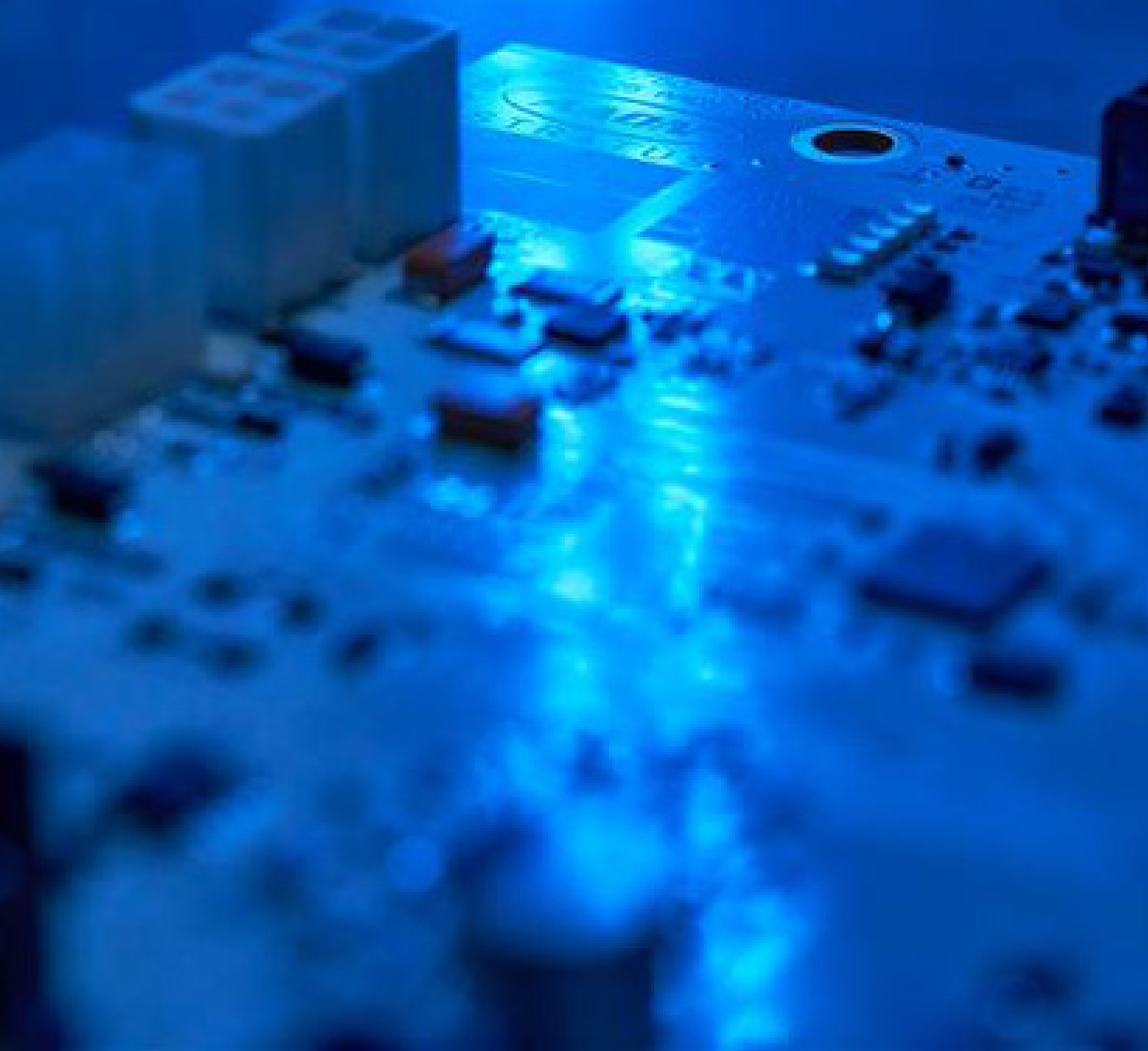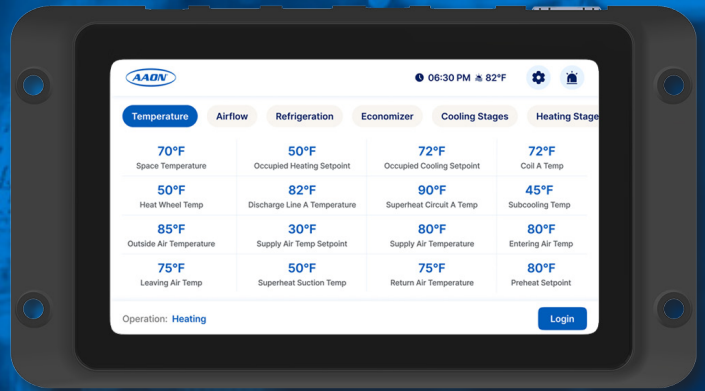# Stratus Installation Sheet Package

STRATUS UNIT MANGER ASM08150

A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility

PHYSICAL

### Multi-board control and communications

The Stratus Unit Manager allows users to interact with system units, coordinating the actions of the various Stratus I-O boards. The Stratus Unit Manager provides the following functionality:

- In-Unit Board Communications
- MS/TP or BACnet IP Communications
- Building IP Network Communications
- EBUS Sensor Communications
- TS Space Sensor Communications

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31°F to 158°F -35°C to 70°C
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Connections	1 Ethernet 1 T1BUS 1 WATT COM 1 BACnet 1 USBA 1 USBC 1 HMI 2 RS-485

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6.77

6.30

2.22 | 3.76
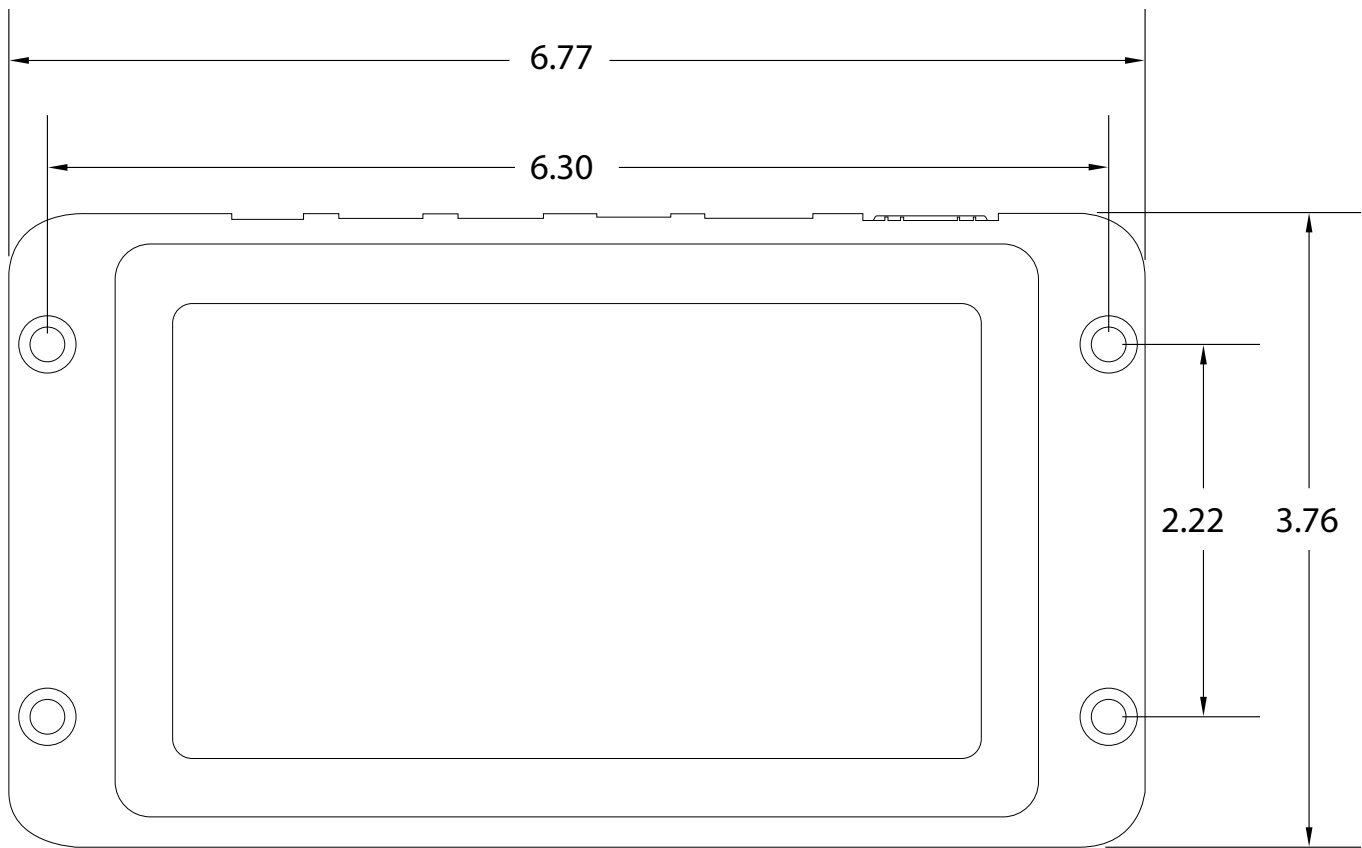
NOTE: All dimensions are in inches.

INSTALLATION

Mounting

The Stratus Unit Manger is designed to be mounted by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Unit Manger needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS POWER COMM ASM08153
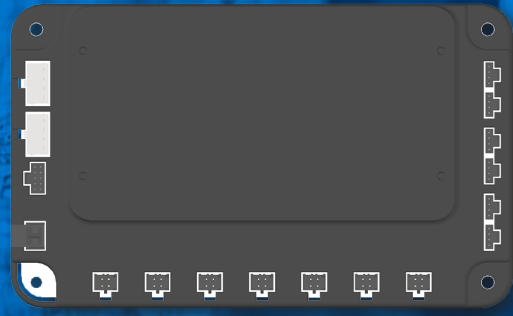
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility
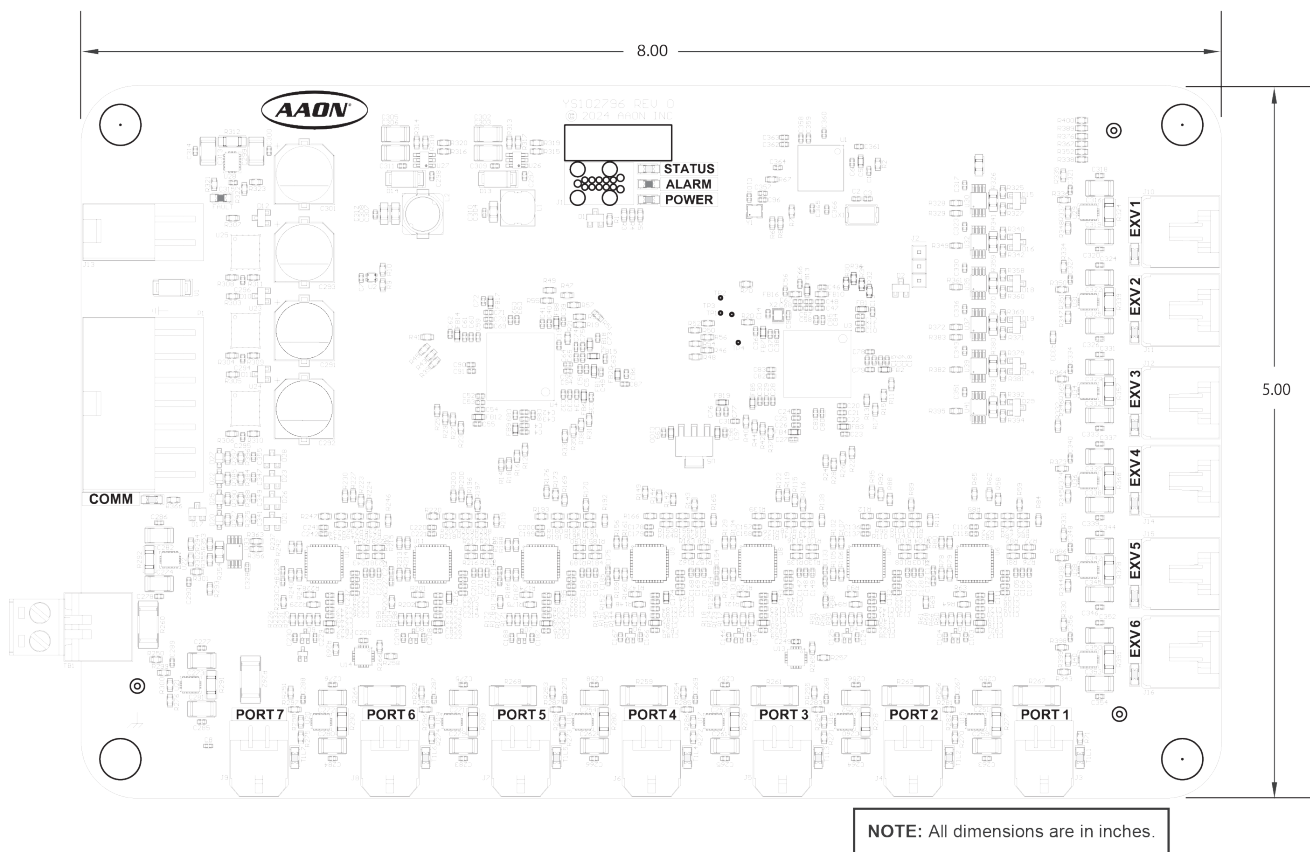
PHYSICAL

High-speed connectivity and communications, all in one

The Stratus Power Comm acts as the primary power and communications I-O board for Stratus.

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	4 Binary Inputs
Connections	7 Ports (6 T1L, 1 Unit Manager) 6 RS-485 with Power Power Downstream Main Power, Aux Power

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Board diagram labels: STATUS, ALARM, POWER, COMM, EXV 1, EXV 2, EXV 3, EXV 4, EXV 5, EXV 6, PORT 7, PORT 6, PORT 5, PORT 4, PORT 3, PORT 2, PORT 1

Dimensions: 8.00, 5.00

NOTE: All dimensions are in inches.

INSTALLATION

Mounting

The Stratus Power Comm is designed to be mounted by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Power Comm needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS AIR HANDLER I-O ASM08156
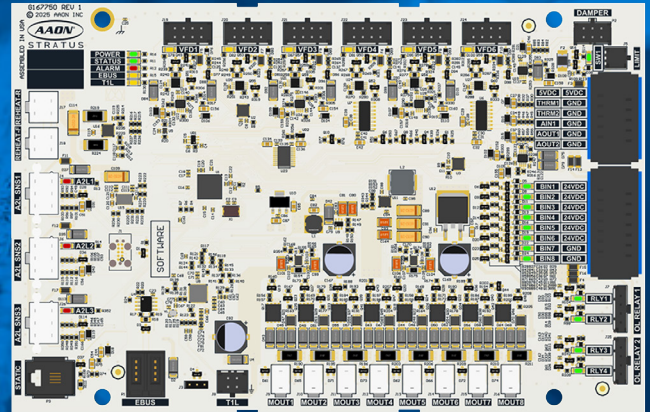
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility

## PHYSICAL

Highly configurable air handling solutions

The Stratus Air Handler I-O is an input/output board tailor made to work in conjunction with the Stratus Unit Manger. Designed with air handling in mind, the Stratus Air Handler I-O provides the following functionality:

- Fan Control
- OA\RTN Damper
- A2L Sensors
- Duct Static Sensor
- Supply, Return, and Space Air Temperatures
- Chilled\Hot Water Valve Controls
- Remote Shutdown
- Supply Fan Airflow Status
- Hood On Status
- BACnet Passthroughs

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	8 Binary Inputs, 1 Analog Input
Outputs	2 Analog Output, 2 Configurable Relays
Connections	8 Mouts (Configurable) 1 Limit Switch 1 Damper 6 VFD Ports 2 Reheat Ports 3 A2L Ports 1 Static Pressure 2 EBUS 1 T1L

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NOTE: All dimensions are in inches.
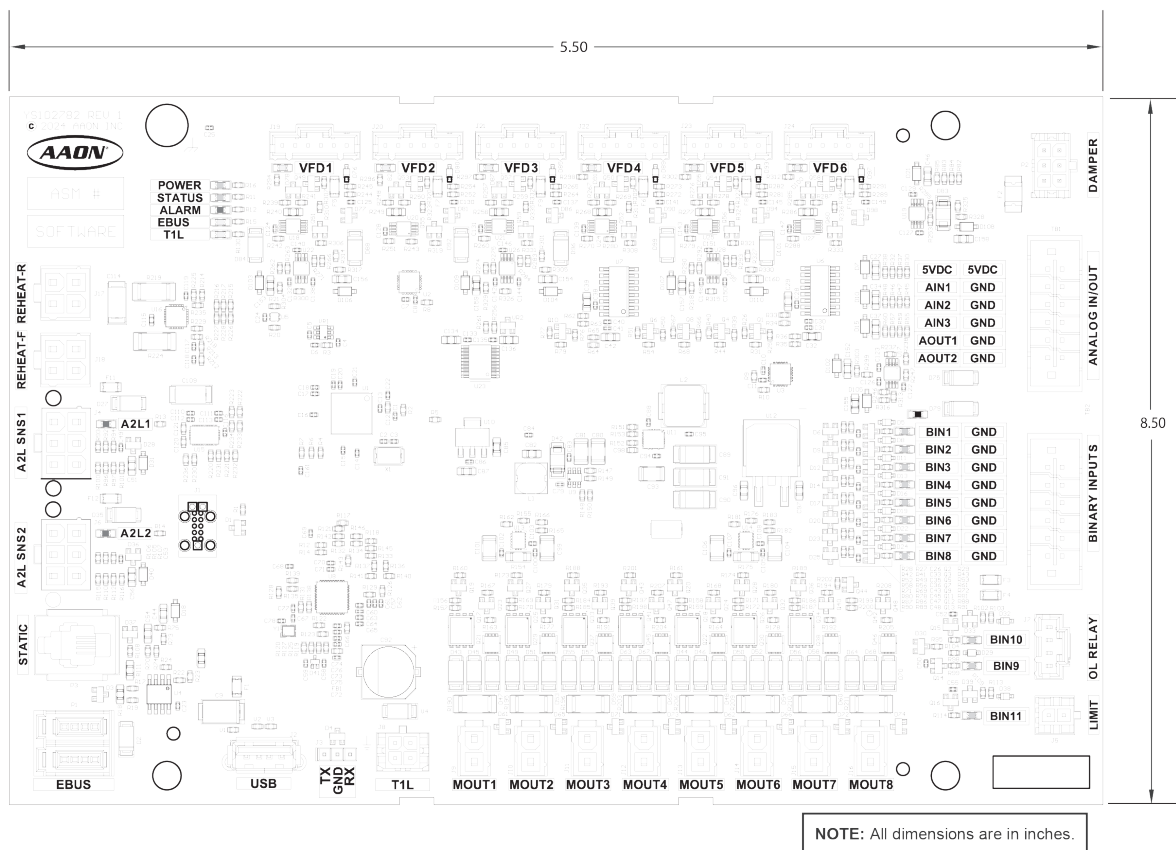
INSTALLATION

Mounting

The Stratus Air Handler I-O is designed to be mounted by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Air Handler I-O needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS COOLING I-O ASM08159
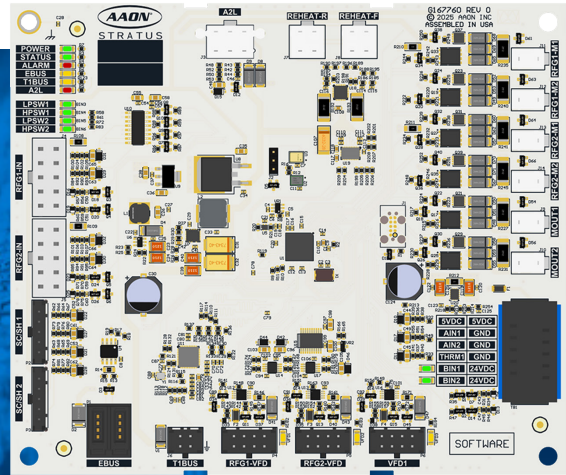
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility

PHYSICAL

Versatile and configurable cooling capabilities

The Stratus Cooling I-O is an input/output board made to work with the Stratus Unit Manger. Designed to address cooling needs, the Stratus Cooling I-O provides the following functionality:

- Compressors
- Reversing Valve Control
- Reheat Valve Control
- Line Temperature Sensors
- Refrigerant Pressure Sensors
- Oil Level Sensor
- Defrost Switch
- Condenser Fan
- A2L Sensors
- BACnet Passthroughs

The cooling board supports the following circuits:

- Single Variable Speed Compressor (VFD)
- Single Variable Capacity Compressor (Digital)
- Single 2-Step Compressor
- Single On\Off Compressor
- Variable Speed Compressor w\ Tandem 2-Step or On\Off Compressor
- Variable Capacity Compressor (Digital) w\ Tandem 2-Step or On\Off Compressor
- 2-Step Compressor w\ Tandem 2-Step or On\ Off Compressor
- On\Off Compressor w\ Tandem On\Off Compressor

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	2 Binary Input, 2 Analog Input
Connections	6 Mouts (Configurable) 2 VFD Comp Ports 1 VFD Port 1 A2L Port 2 Reheat Ports 2 Cooling Ports 2 EBUS Ports 1 T1L Port 1 T1BUS Port 1 USB Port

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NOTE: All dimensions are in inches.
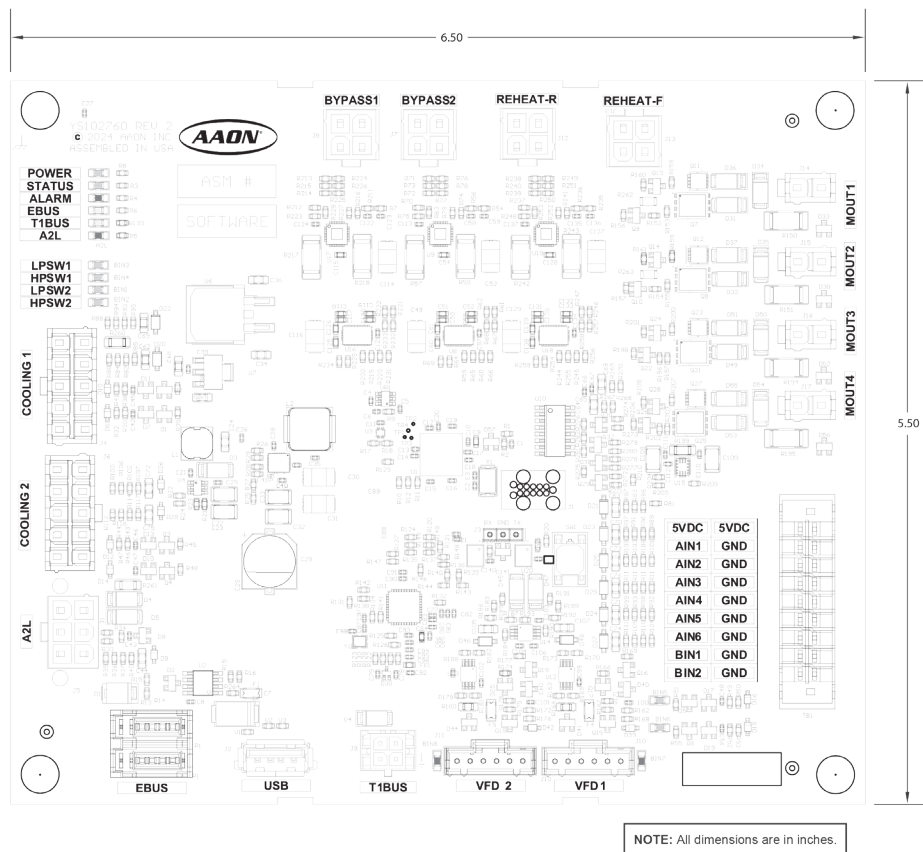
INSTALLATION

Mounting

The Stratus Cooling I-O is designed to be mounted by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Cooling I-O needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS HEATING I-O ASM08162
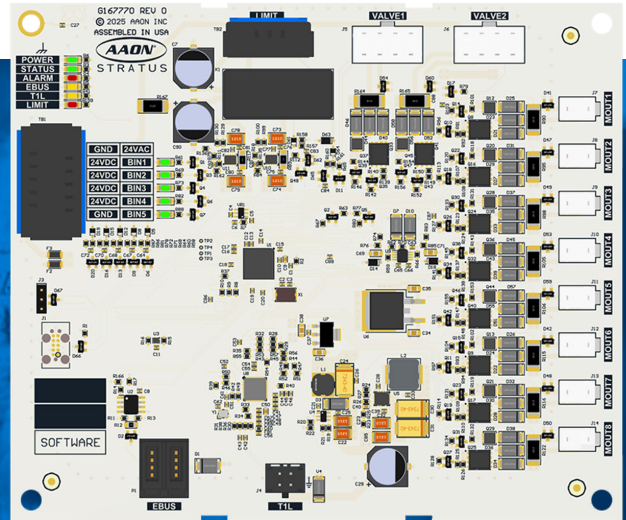
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility
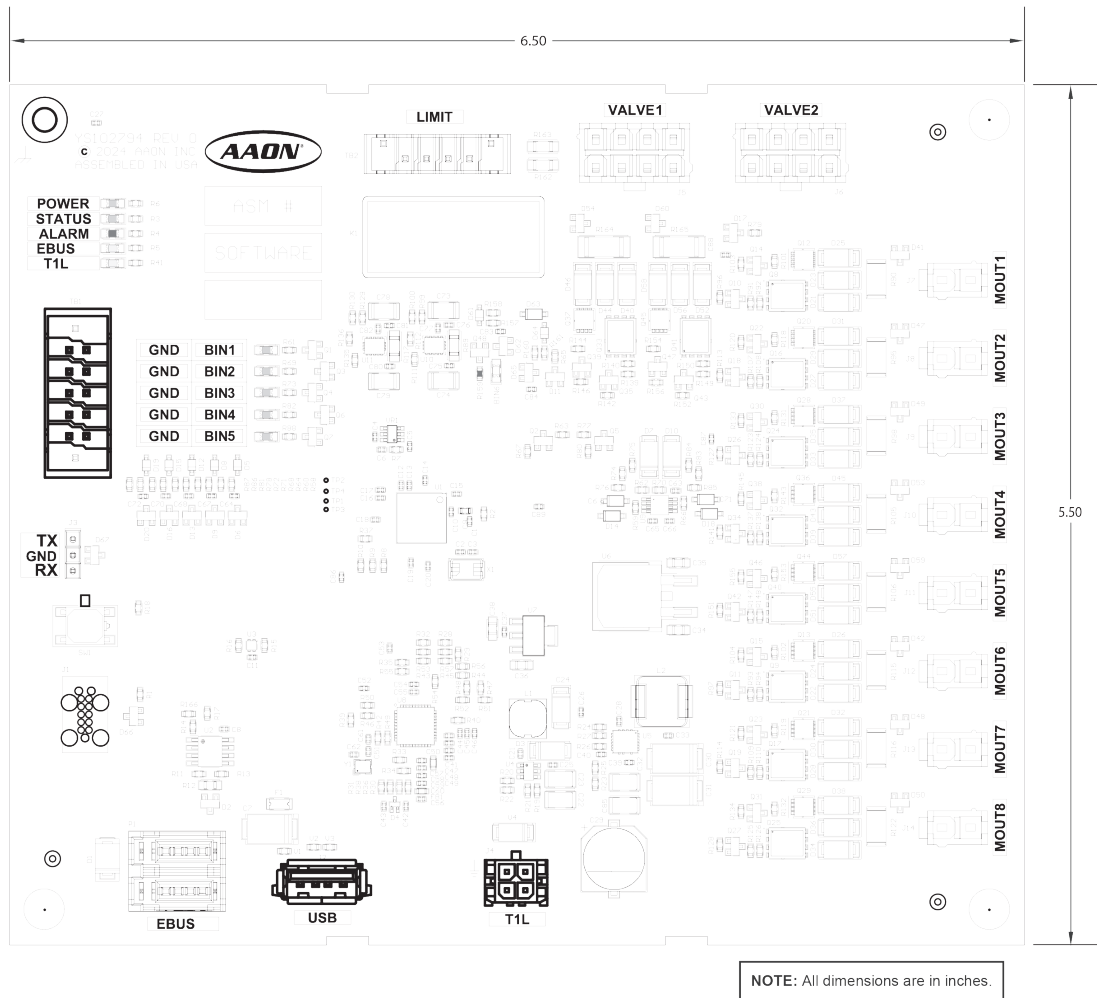
PHYSICAL

Highly customizable heating solutions

The Stratus Heating I-O is an input/output board made to collaborate with the Stratus Unit Manger. Designed with unique heating requirements in mind, the Stratus Heating I-O provides the following functionality:

- ModGas Valves
- Ignition Proof Status
- SCR Electric Signals
- Heat Enables
- Inducer Fan Low Speed
- BACnet Passthroughs

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	5 Binary Inputs
Connections	8 Mouts (Configurable) 2 Valve Ports 2 EBUS Ports 1 T1L Port 1 Limit Switch

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LIMIT VALVE1 VALVE2

AAON

POWER
STATUS
ALARM
EBUS
T1L

GND BIN1
GND BIN2
GND BIN3
GND BIN4
GND BIN5

TX
GND
RX

MOUT1
MOUT2
MOUT3
MOUT4
MOUT5
MOUT6
MOUT7
MOUT8

EBUS USB T1L

NOTE: All dimensions are in inches.

INSTALLATION

Mounting

The Stratus Heating I-O is designed to be mounted by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Heating I-O needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS OUTDOOR AIR I-O ASM08165
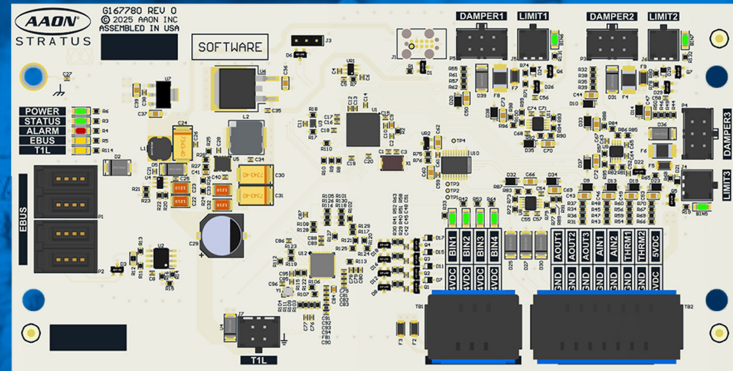
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility

## PHYSICAL

Highly configurable outdoor air solutions

The Stratus Outdoor Air I-O is an input/output board tailor made to work in conjunction with the Stratus Unit Manger. Designed specifically considering the challenges of outdoor air, the Stratus Oudoor Air I-O provides the following functionality:

- OA/RTN Air Damper
- Exhaust Air Damper
- ERV Bypass Damper
- Outside Air Temperature
- Return Air Temperature
- Supply Airflow Switch
- Return Airflow Switch
- Exhaust Airflow Switch
- Dirty Filter Switch
- Building Pressure Sensor
- Exhaust Pressure Sensor
- BACnet Passthroughs

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	4 Binary Input, 2 Analog Inputs
Outputs	3 Analog Outputs
Connections	3 Limit Switches 3 Dampers 4 EBUS Ports 1 T1L Port

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NOTE: All dimensions are in inches.
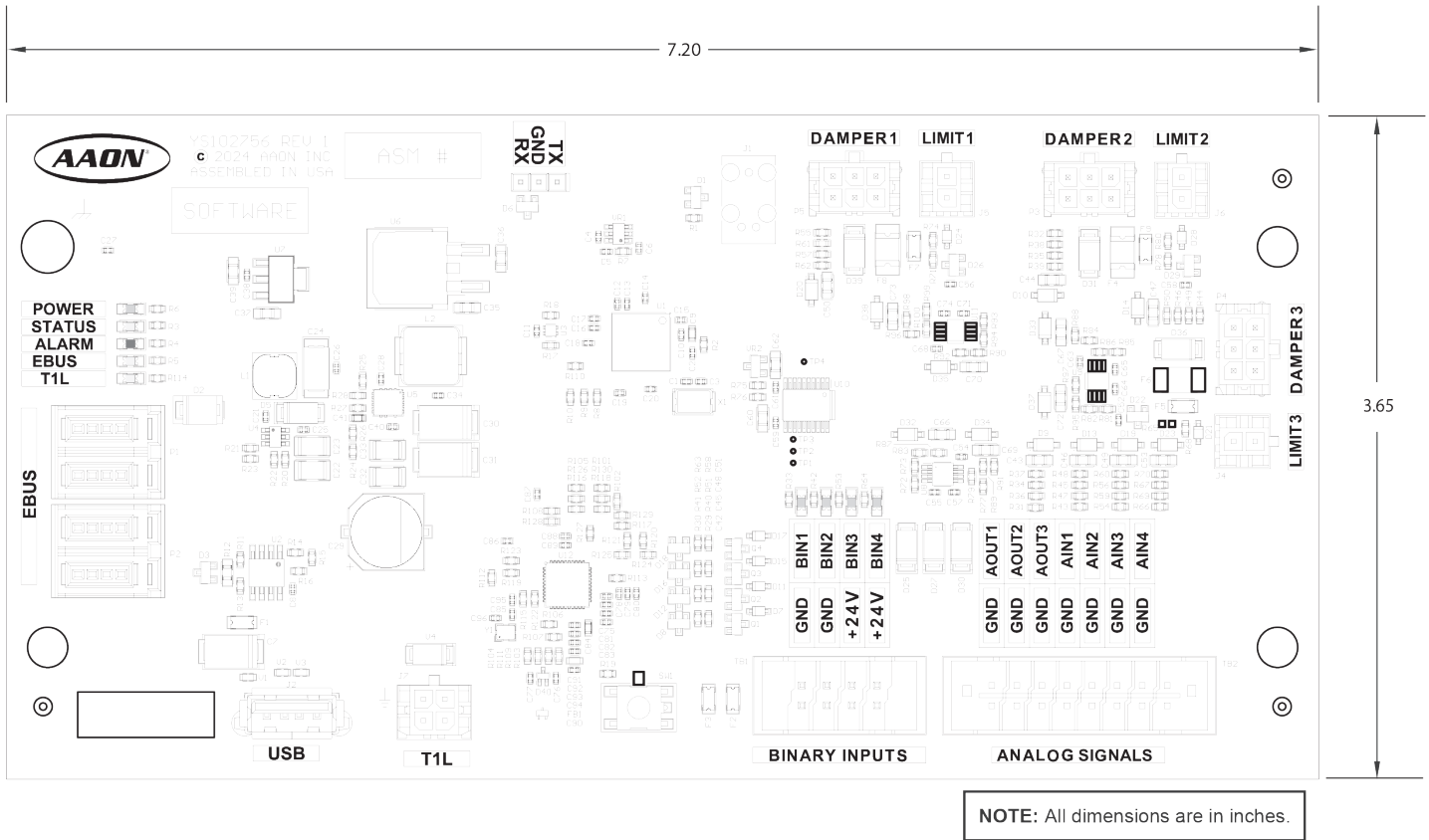
INSTALLATION

Mounting

The Stratus Outside Air I-O is housed in a plastic enclosure. The enclosure itself must first be mounted before the board can be mounted within.

The Stratus Outside Air I-O is designed to be mounted within the enclosure by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Outside Air I-O needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS ENERGY RECOVERY ASM08168
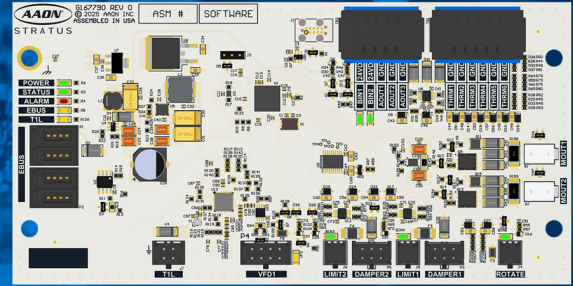
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility

PHYSICAL

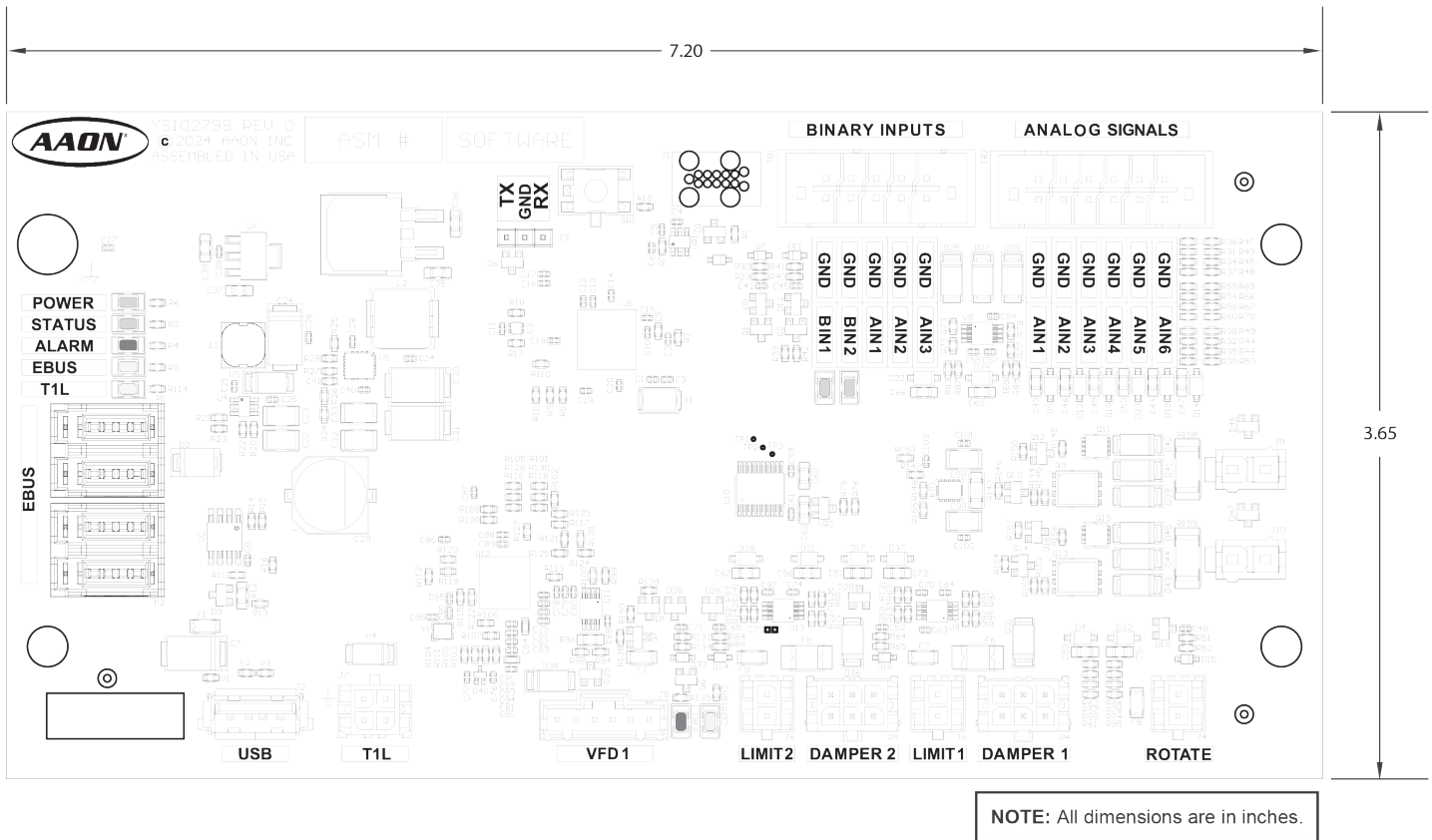### Solutions for energy recovery with advanced configurability

The Stratus Energy Recovery board an input/output board created specifically to work alongside the Stratus Unit Manger to address energy recovery needs. The Stratus Energy Recovery board includes the following functionality:

- Heat Wheel Speed Signal
- Heat Wheel Enables
- Bypass Dampers
- Entering Air Temperatures
- Leaving Air Temperatures
- Dirty Filter Switches
- Rotation Status
- BACnet Passthroughs

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	2 Binary Input
Outputs	3 Analog Output
Connections	6 Thermistor (Configurable) 4 EBUS Ports 1 USB Port 1 T1L Port 2 Limit Switches 2 Damper Switches 1 Rotate Port

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BINARY INPUTS	ANALOG SIGNALS	

POWER
STATUS
ALARM
EBUS
T1L

EBUS

GND BIN1
GND BIN2
GND AIN1
GND AIN2
GND AIN3

GND AIN1
GND AIN2
GND AIN3
GND AIN4
GND AIN5
GND AIN6

TX GND RX

USB   T1L   VFD 1   LIMIT2   DAMPER 2   LIMIT1   DAMPER 1   ROTATE

7.20

3.65

NOTE: All dimensions are in inches.

INSTALLATION

Mounting

The Stratus Energy Recovery is housed in a plastic enclosure. The enclosure itself must first be mounted before the board can be mounted within.

The Stratus Energy Recovery is designed to be mounted within the enclosure by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Energy Recovery needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information

STRATUS PREHEAT I-O ASM08171
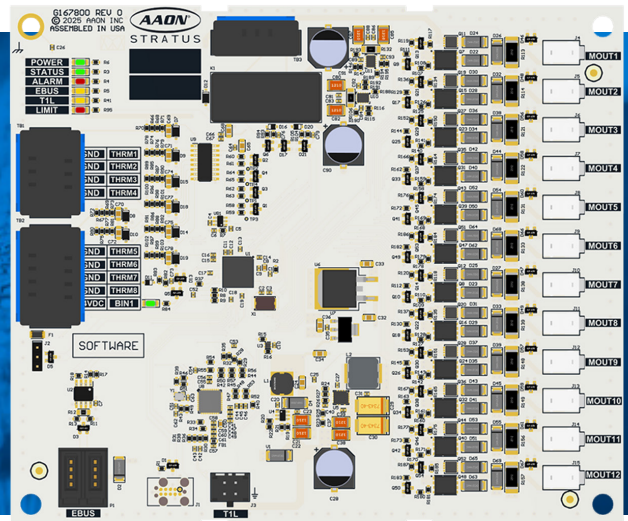
A next-generation controller designed for seamless integration and total customization. Built to support a wide range of products with adaptable functionality and unmatched versatility

PHYSICAL

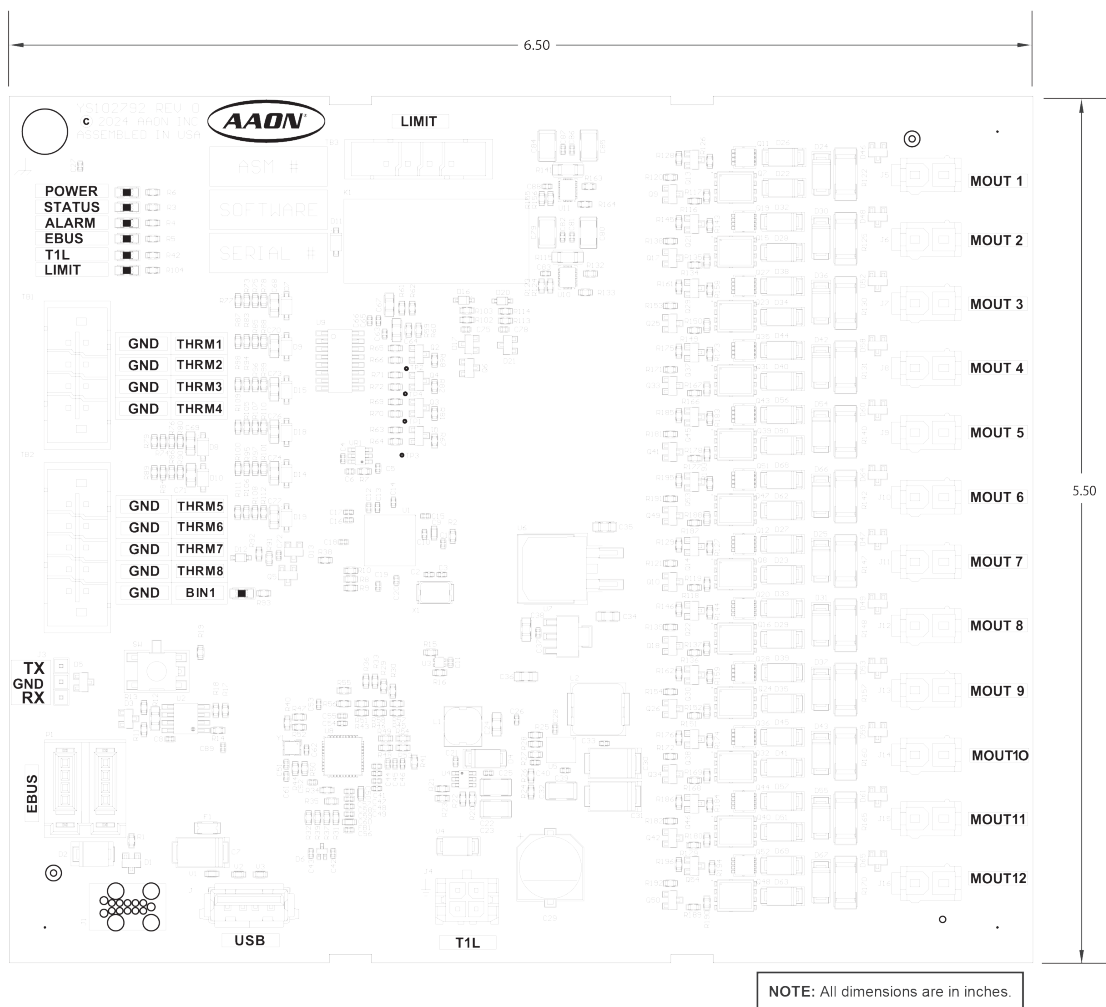### Versatile preheat solutions with extensive configuration options

The Stratus Preheat I-O is an input/output board specifically tailored to work in tandem with the Stratus Unit Manger. Designed specifically with configurability and preheat in mind, the Stratus Preheat I-O provides the following configurable options:

- Stage Enables
- PWM SCR Signal
- Entering Air Temperatures
- Leaving Air Temperatures
- BACnet Passthroughs

Electrical and Environmental	
Operating Power	23-26 VDC 24 VDC Nominal
Operating Temperature	-31ºF to 158ºF -35ºC to 70ºC
Power Consumption	10W Nominal 90W Maximum
Operating Humidity	0-95% RH Non-Condensing
Inputs	1 Binary Input
Connections	12 Mout (Configurable) 8 Thermistor (Configurable) 2 EBUS Ports 1 T1L Port 1 Limit Switch

6.50

5.50

LIMIT

POWER
STATUS
ALARM
EBUS
T1L
LIMIT

GND THRM1
GND THRM2
GND THRM3
GND THRM4

GND THRM5
GND THRM6
GND THRM7
GND THRM8
GND BIN1

TX
GND
RX

EBUS

USB   T1L

MOUT 1
MOUT 2
MOUT 3
MOUT 4
MOUT 5
MOUT 6
MOUT 7
MOUT 8
MOUT 9
MOUT1O
MOUT11
MOUT12

NOTE: All dimensions are in inches.

INSTALLATION

Mounting

The Stratus Preheat I-O is designed to be mounted by using the 4 mounting holes in the enclosure base and the included mounting screws (#8 x 1" sheet metal screws).

The Stratus Preheat I-O needs to be installed in an environment which can maintain a temperature range of -31°F to 158°F not to exceed 95% RH levels (Non-Condensing). It is important to mount the device in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

Scan the code for additional product information