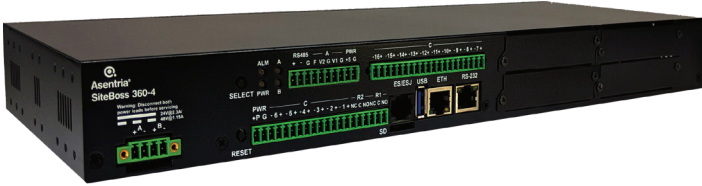




Asentria® | SiteBoss® 360-4 and S360-0



IDEAL USES

The S360-4 and S360-0 are versatile and powerful systems used for monitoring and control of equipment sites. This is a high powered full function SiteBoss. Both S360 options have a built in RS-485 serial port which is ideal for monitoring and controlling Modbus capable devices as well as 2 USB Ports and an SD card slot for data storage.

The S360 can be used in remote cabinets or enclosures, from small cabinet locations up to large walk-in enclosures as well as server equipment locations. This device supports environmental monitoring, power monitoring from both AC and DC sources, generator fuel levels, fuse panels, and monitoring of inherently non-SNMP type equipment such as HVAC, UPS, etc. The device also supports remote access to equipment via an Ethernet connection.

DESCRIPTION	CODE
SiteBoss 360-4	S360-4
SiteBoss 360-0	S360-0
Main Board IO - 6C2RC	/6C2RC
AC Power Supply	/ACUS**
DC Power Supply 24/48VDC	/DC
Spare rack mount kit, 19" and 23" racks, S360-0	5006-114
Spare rack mount kit, 19" and 23" racks, S360-4	5006-113
DIN Rail Mounting Adapter	/DIN
S360 Slot Card Cover Kit, Black	5006-120

** For International usage you can specify /ACUK for a UK style power cord, /ACEU for a European power cord, /ACAU for an Australian power cord, or /ACJP for a Japanese style power cord.

HIGHLIGHTED FEATURES

- Based on powerful Linux operating system
- In-band or out-of-band access to remote serial equipment
- Secure port forwarding to on-site equipment interfaces
- Out-of-band access to remote network equipment
- Base unit supports (1) RS-232 serial
- A S360 has (1) RS-485 Serial Modbus port for easy integration with on site equipment.
- (1) 10/1000 Ethernet port for network integration
- (1) SD expandable memory slot
- (2) USB Ports for upgrades and settings loads and equipment integration.
- (1) Asentria Sensor port: (ES/ESJ port)
- DC power supply (optional) either 24 or -48VDC
- AC Power Wall plug converts to standard Asentria +15VDC power jack
- Full featured Lua scripting language for custom configurations
- 12VDC and 5VDC power outs to power sensors and door security options
- Easy to understand MIB works well with third-party SNMP Managers
- Compatible with NetBoss®, ProVizion®, HP Openview®, Spectrum®, InterMapper®, Nagios®, SNMPc®, Netcool®, Telenium™, TrapServer®, SilverStorm Technologies™, SitePortal®, SolarWinds®, and all other SNMP-based network management systems

OPTIONAL EXPANSION CARDS

Both units have internal Mezzanine expansion cards. The 10 IO points next to the LEDs come standard and are called out with a single letter, A or B. These are points that have special use functions. There is one optional internal 20 point IO expansion slot in both version of the S360. The S360-4 features four expansion slots which allow for quick and inexpensive custom configuration possible. Various IO and optional communication interface cards can be added to expand the monitoring capabilities of your SiteBoss.

CONFIGURATION

The S360 catalog number specifies the configuration and options you want to order with your S360 unit. The catalog number lists the options in the order shown below. Items with a * are truly optional and are omitted if not desired.

BASE UNIT + MAIN BOARD I/O + CODE FOR LEFT MEZZANINE IO + *INTERNAL WIRELESS MODEM + *INTERNAL EXPANSION CARD + POWER SUPPLY + *EXPANSION CARDS (S360-4 ONLY)

Base unit and base options are separated with a slash (/). The following is a valid catalog number:

- S360-4/6C2RC/A/10C/ACUS-E4E
- S360-0/6C2RC/A/10C/DC
- S360-4/6C2RC/A/10C/DC-E8C-E8C
- S360-0/6C2RC/A/4C4RC/DC
- S360-4/6C2RC/A/IML1P/1W3C4RC/DC-E4E
- S360-0/6C2RC/A/IML1V/10C/DC
- S360-0/6C2RC/A/10C/ACUS
- S360-0/6C2RC/A/ACUS

DEVICE SPECIFICATIONS

- Unit Width: 15.50in / 44.45cm (360-4) or 8.26in / 20.99cm (S360-0)
- Unit Depth: 6.09in / 15.46cm
- Unit Height: 1.68in / 4.28cm
- Unit Weight: 2lbs/ 1kg (Dependent on configuration)
- Power: 12-17VDC input range; 24-60VDC with optional DC card installed
- Power Usage: 5W(Max) without DC card installed
- Operating Temperature: -40° to 60°C
- Operating Humidity: 0 to 95% (Non-condensing)
- RoHS, UL Certified
- Mean Hours Between Failure: 250000 hrs

BASE UNIT CONFIGURATION

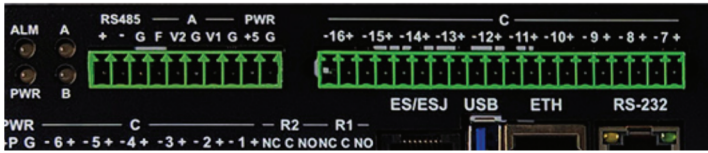
- (1) Main Board 10 I/O points
- (1) RS-485 Serial Port
- (1) ES/ESJ Port
- (1) Specialty IO Mezzanine
- (2) USB
- (1) Mezzanine card slot
- (1) SD Slot
- AC Power jack and optional DC Power
- (1) 10/1000 Ethernet Port
- 12VDC and 5VDC outputs
- (1) RS-232 Serial Port
- Optional internal modem card





Asentria® | S360-4 Expansion Cards

INTERNAL I/O CONFIGURATIONS



The internal Expansion cards, also called mezzanine cards, can be used in either the S360-0 or S360-4. These expansion cards must be installed at the factory.

Left Mezzanine Specialty I/O Points

The 10 IO points next to the LEDs on both versions of the S360 are called out with a single letter, A or B in the part number. These are points that have special use functions.

/A Generator/Fuel Monitoring IO - adds (1) RS-485 Serial port, (1) Resistive Input for fuel sensor, (2) non-isolated voltage inputs, and (1) 5VDC power output for powering sensors.

/B Pulse Counter IO - adds (1) RS-485 Serial port, (2) Pulse Counting points, and (1) 5VDC power output for powering sensors.

Internal I/O Points

There is one optional internal 20 point IO expansion slot in both version of the S360. The Input/Output points are available in the specified I/O configurations.

/10C adds 10 non-isolated contact closures

/4C4RC adds four contact closure points plus 4 form C relays

/1W3C4RC adds Wiegand Card site access reader functionality as well as 3 non-isolated contact closures and 4 form C relays.

/4V4RC adds 4 voltage inputs, as well as four form C relays

Internal Modems

/IML1P adds internal CAT1 Modem PTCRB

/IML1V adds internal CAT1 Modem Verizon Wireless

/IML3P adds internal CAT3 Modem PTCRB

/IML3V adds internal CAT3 Modem Verizon Wireless

/IMLDE Adds internal dual SIM Modem Europe, Middle East & Africa

DESCRIPTION	CODE
Generator/Fuel Monitoring IO - RS485 1F 2V 5P	/A
Pulse Counter IO - RS485 2PL 5P	/B
Mezzanine IO - 10C	/10C
Mezzanine IO - 4C4RC	/4C4RC
Mezzanine IO - Wiegand (1W3C4RC)	/1W3C4RC
Mezzanine IO - 4V4RC	/4V4RC
Mezzanine IO - 1CB6C 1 Canbus, 6 Contact Closures	/1CB6C
Internal CAT1 Modem PTCRB (AT&T and T-Mobile)	/IML1P
Internal CAT1 Modem Verizon	/IML1V
Internal LTE Dual SIM Modem Europe, Middle East & Africa	/IMLDE
Internal CAT3 Modem PTCRB	/IML3P
Internal CAT3 Modem Verizon	/IML3V

SLOT CARDS

Expansion cards add abilities to an Asentria S360-4 that allow for additional in-band or out-of-band connectivity methods, additional connectivity methods to local equipment, various I/O points, and other specialized abilities. Asentria designed its product line with a scalable, flexible, modular approach that allows you to mix and match almost any combination of Expansion Cards.

The S360-4 Expansion cards operate in the same manor as the expansion cards in our older units. They are not, however, capatable with the older units and older unit expansion cards will not work on an S360-4.

For ordering, Expansion card options are appended to the end of the base catalog number, with the first expansion option being slot 1, the next being slot 2 and so on. While most configurations and combinations of Expansion cards in a given unit are allowed, there are some limitations. Please consult with Asentria Sales to answer any questions.

Expansion cards can be ordered and installed in units that have already been deployed with open expansion slots. This allows adding functionality as needs arise after the initial deployment. Any individually ordered card will arrive with installation instructions.

DESCRIPTION	CODE
E8C (8) Contact Closure Inputs	-E8C
E8CI (8) Isolated Contact Closure Inputs	-E8CI
E4VP (4) Voltage Inputs plus (4) +/-11VDC Pwr Outputs	-E4VP
E4VP5 (4) Voltage Inputs plus (4) + 5 VDC Pwr Outputs	-E4VP5
E8V (8) Voltage Inputs	-E8V
E8VI (8) Isolated Voltage Inputs	-E8VI
E8R (8) Low Current Relays	-E8R
E8M (8) 4-20mA Current Inputs	-E8M
E8SR (8) Solid State Relays	-E8SR
E4C4SR (4) Contact Inputs and (4) Solid State Relays	-E4C4SR
E4C4V (4) Contact and (4) Voltage Inputs	-E4C4V
E4VI4C (4) Contact and (4) Isolated Voltage Inputs	-E4VI4C
E4C4R (4) Contact and (4) Low-Current Relay	-E4C4R
E5RC (5) Form C Relay	-E5RC
E4C1W1R (4) Contact, (1) Wiegand intfc with power, (1) Low-Current Relay.	-E4C1W1R
E2W2R (2) Wiegand intfc with power, (2) Low-Current Relay.	-E2W2R
E4V4M (4) Voltage and (4) 4-20mA Sensor	-E4V4M
E4V4R (4) Voltage inputs and (4) Low-Current Relay outputs	-E4V4R
E4C4M (4) Contact and (4) 4-20mA Sensor	-E4C4M
E4MI4C (4) Contact and (4) Isolated 4-20mA Sensor	-E4MI4C
E4C5P1V1F1M (4) Contact (1) 5v Power (1) V (1) M (1) F	-E4C5P1V1F1M
E4C5PA1VA1F1M (4) Contact (1) 5v Power+ (1) V[-5V to 5V] (1) M (1) F	-E4C5PA1VA1F1M
E4PL4C (4) Pulse Counter Inputs and (4) Contact Closure Inputs	-E4PL4C
E16C (16) RJ45 Contact Closure Inputs	-E16C
E4S (4) RS232 Serial Port	-E4S
E4E (4) Port Ethernet	-E4E
E2POE (2) Power over Ethernet (POE) ports	-E2POE
E1SFP (1) SFP port	-E1SFP
E2AC Controller for 2 HVAC units	-E2AC





C OR CI - CONTACT CLOSURE INPUT

Add contact closure inputs.

- Works with relay-based units and TTL-based outputs
- C version contact closures have a common ground
- CI version each ground is electrically isolated for maximum electrical protection

V OR VI - ANALOG VOLTAGE INPUT

Add 8 non-isolated analog voltage inputs.

- Voltage Range: -60/+60V
- Resolution: 0.1 VDC
- Accuracy: +/- 0.5 VDC
- V version common ground for all sensors
- VI version ground is electrically isolated for maximum electrical protection

R - LOW-CURRENT RELAY OUTPUT

Add 8 relay outputs to any Asentria base unit

- Max switched voltage: 60V Peak (AC or DC)
- Max switched power: 30W (DC)
- Max switched current: 0.6A

SR - SOLID STATE RELAY OUTPUT

Add solid state relay outputs. Solid state relays provide a higher current option than those on the 8R.

- Max switched voltage: 60VDC peak
- Max switched power: 90W
- Max switched current: 1.5A

RC - FORM C RELAYS (NO, NC)

Add Form C Relays.

- Mechanical relays retain state upon power cycle
- Mechanical relay current capacity: 0.6A

M OR MI - 4-20mA CURRENT INPUT

Add 4-20mA current inputs.

- Resolution: 0.1mA
- Accuracy: 0.1mA
- MI version for individually isolated 4-20mA

W - WIEGAND INTERFACE POINT

Add Wiegand interface

- For use with RFID Reader ESW-RFID1, ESW-RFID2 and ESW-RFID3

5P - 5V POWER OUTPUT

Add 5VDC power output for powering sensors

P - 11V POWER OUTPUT

Add 11.5VDC power output for powering sensors

F - (FUEL) RESISTIVE INPUT

Add Resistive Input for fuel sensor

CT - AC CURRENT TRANSFORMER INPUT

Add 4 non-isolated dry contact inputs and 4 AC current transformer inputs to any Asentria base unit with an expansion slot.

- The CT inputs are designed to read 0-1VAC input
- Designed for use with the 5004-101, 5004-102 and 5004-103 Split Core AC transformers.

VS - VOLTAGE SAMPLING

Add 4 non-isolated dry contact closure inputs, 1 voltage sampling, and 3 voltage sensors to any Asentria base unit.

- The VS option stands for voltage sampling. It monitors the voltage to detect short drops or peaks not detected by the standard V input.

16C - RJ45 CONTACT CLOSURE INPUTS

Add 16 non-isolated dry contact closure inputs using RJ45 style connections for easy integrations with premade harness style monitoring equipment.

Asentria prefabricated cabling options:

- 2060-114 16C RJ45 cable, 32 ft.
- 2060-116 16C RJ45 cable, 32 ft., with DB37 connector
- 2060-117 (3) RJ45 to DB25 Cable, 2m

PL - PULSE COUNTER INPUTS

Add pull counter input point.

S - RS232 SERIAL PORT

Add 4 RS232 serial ports to a compatible Asentria base unit. Card has (4) RJ45 type connectors.

- Baud rate: 300(Min) / 115200(Max)
- Includes (4) 6 ft. RJ45 serial cables and (4) RJ45/DB9M DTE Adapters

E - 10/100 ETHERNET PORT

Add 10/100 Ethernet ports to a compatible Asentria base unit. Up to (2) 4E cards can be installed per unit.

- Allows independent IP address from unit's other network interfaces
- Serves IP addresses via DHCP
- Simplifies site administration
- Integrates remote access
- Provides static routing and port forwarding
- Layer 2 switch

POE - 10/100 POWER OVER ETHERNET (POE) PORT

Add 10/100 Power over Ethernet ports to a compatible.

SFP - SMALL FORM-FACTOR PLUGGABLE TRANSCEIVER

Add (1) Small Form-factor Pluggable port for connectivity to optical fiber networks. Optical transceiver modules and 5 meter, LC to LC, Single-Mode Duplex fiber patch cable are available to order separately.

AC - 2 CHANNEL HVAC VOLTAGE CONTROL CARD

Add (2) HVAC voltage control channels. Advanced control of HVAC systems. The 2AC card allows for most single, or dual HVAC systems, with thermostat control input, to be controlled by a SiteBoss.

- 1A per channel