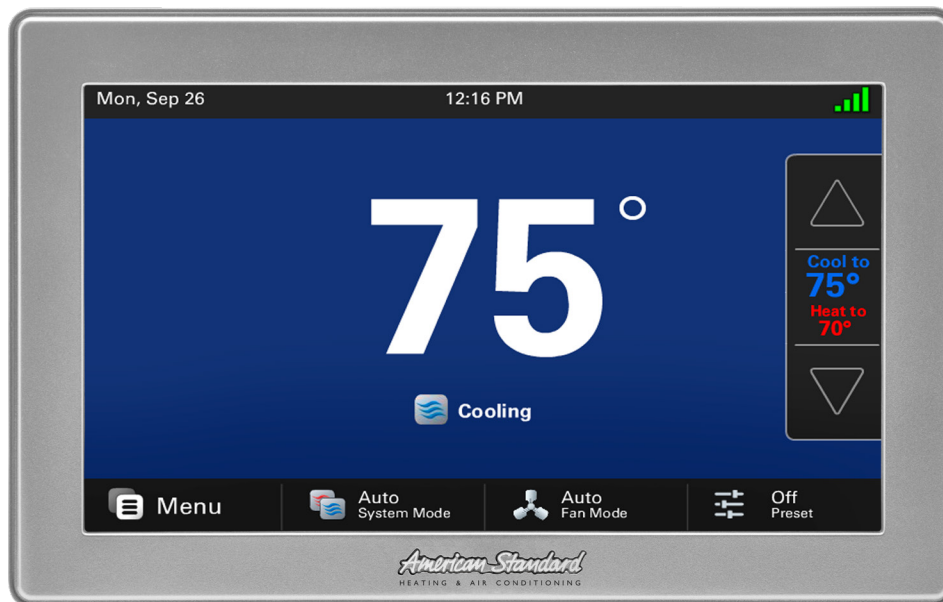# American Standard

HEATING & AIR CONDITIONING

Product Data
American Standard Comfort Controls

Model AZON1050AC52ZA

Representative-only illustrations included in this document

WITH NEXIA™

Product Data

American Standard
Model: ACONT624AS42DA
Name: Silver 624

Product Specifications

SPECIFICATION	DESCRIPTION
Dimensions	5.9"w x 3.48"h x .94"d
Touchscreen Display	3.8"w x 2.3"h (4.3" diagonal)
Configurations	Heat Pump, Heat/Cool, Dual Fuel, Heat Only, Cooling Only
Maximum Number of Stages	4 Stages Heat, 2 Stages Cooling
Storage/Operating Temperature	-40°F to 175°F, 5% to 95% RH non-condensing
Input Power	24 VAC
Power Consumption	1.9 Watts Standby
Wire Usage	18 AWG
System Modes	Auto, Heating, Cooling, Off, Emergency Heat
Fan Modes	Auto, On, Circulate
Auxilliary Heat Lockout	32°F to 70°F
Compressor Heat Lockout	5°F to 70°F
Cooling Setpoint Temperature Range	60°F to 99°F, 1°F resolution
Heating Setpoint Temperature Range	55°F to 90°F, 1°F resolution
Indoor Temperature Display Range	20°F to 119°F
Outdoor Temperature Display Range	-31°F to 119°F
Indoor Humidity Display Range	0% to 99%, 1% resolution
Minimum Cycle Off Time Display	Compressor: 5 minutes, Indoor Heat: 1 minute

Features

- Z-wave connectivity
- Nexia™ smart home system compatible① ②
- Control from a smartphone, tablet, or computer① ②
- Geo Fencing① ②
- 4.3" diagonal black and white touchscreen
- 7 Day programmable with up to 4 schedules per day
- Humidity sensor and RH display
- Remote temperature sensor connections (1 indoor/1 outdoor)
- Auxiliary & compressor heat lockouts
- Auxiliary dry contact – control whole house humidifier or dehumidifier or ventilation system
- Enhanced dehumidification (cooling)
- Adjustable variable speed fan settings (PWM)
- Energy Savings Mode (ESM)
- Screen lock and guest lock
- Service test modes
- Upgradeable software
- Silver/Gray color
- Limited Warranty: 1 year Base/5 year Registered

Application:

HVAC system compatatibility:
Up to 4 Stages Heat/2Stages Cool
Conventional gas/electric, heat pump, dual fuel systems and standard boilers (baseboard & radiators)
Remote Indoor Sensor (optional): ZZSENSAL0400AA
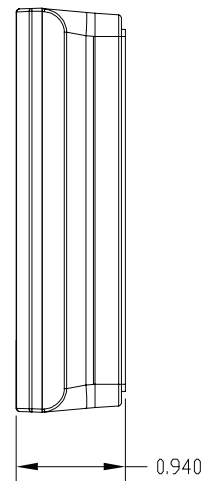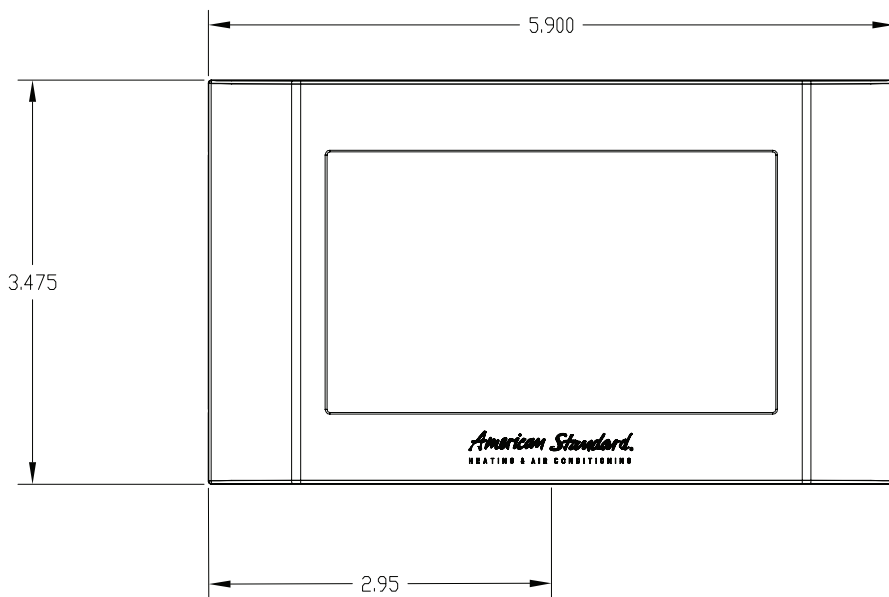Remote Outdoor Sensor (optional): BAYSEN01ATEMPA
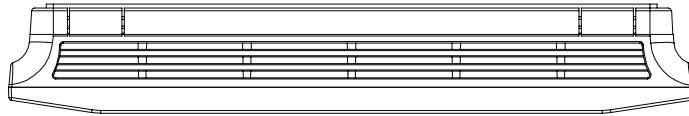Wall Cover Plate BAYCOVR800A

Product Data

American Standard

Model: ACONT624AS42DA

Name: Silver 624

Outline Drawing

① Requires internet service, Nexia™ Bridge, and Nexia™ smart home system registration

② Accessory Nexia™ Bridge required

Product Data

American Standard

Model: ACONT824AS52DA

Name: Gold 824

Product Specifications

SPECIFICATION	DESCRIPTION
Dimensions	5.43"w x 3.39"h x 1.30"d
Touchscreen Display	4.15"w x 2.65"h (4.3" diagonal)
Configurations	Heat Pump, Heat/Cool, Dual Fuel, Heat Only, Cooling Only
Maximum Number of Stages	5 Stages Heat, 2 Stages Cooling
Storage/Operating Temperature	-40°F to 175°F, 5% to 95% RH non-condensing
Input Power	24 VAC
Power Consumption	3VA typical, 7VA max
Wire Usage	18 AWG
System Modes	Auto, Heating, Cooling, Off, Emergency Heat
Fan Modes	Auto, On, Circulate
Auxilliary Heat Lockout	32°F to 70°F
Compressor Heat Lockout	5°F to 70°F
Cooling Setpoint Temperature Range	60°F to 99°F, 1°F resolution
Heating Setpoint Temperature Range	55°F to 90°F, 1°F resolution
Indoor Temperature Display Range	-40°F to 122°F
Outdoor Temperature Display Range	-40°F to 140°F
Indoor Humidity Display Range	0% to 100%, 1% resolution
Minimum Cycle Off Time Display	Compressor: 5 minutes, Indoor Heat: 1 minute

Features

- Wi-Fi (802.11 b/g/n) or Ethernet connection
- Control from a smartphone, tablet, or computer[1]
- NEXIA™ Z-Wave Bridge Built Inside (Home Automation Hub)
- Connect over 200 Z-Wave devices
- Geo Fencing[1]
- Nexia™ Diagnostics Ready[1]
- Compatible with conventional 24 Volt systems
- Cooling, heating, heat pump, and dual fuel
- 7 Day programmable with up to six schedules per day
- Five day weather forecast, weather radar, and weather alerts[1]
- Indoor relative humidity display and enhanced dehumidification
- 2 auxiliary dry contacts for control of: a whole house humidifier, dehumidifier, or ventilation system
- Test modes and alert diagnostics
- Upgradeable software
- Silver/Gray color
- Limited Warranty: 5 year Base/10 year Registered

Application:

HVAC system compatatibility:
Conventional gas/electric, heat pump, and dual fuel systems
Conventional boiler systems (forced air only)
Conventional HVAC systems:
2 Heat / 2 Cool
Heat Pump systems: Up to 5 stages heat / 2 stages cool (2 compressor heat - 3 auxiliary heat / 2 cooling)
Heat Pump switchover valve: Selectable "with cool or with heat"
Remote Indoor Sensor (optional): ZZSENSAL0400AA
Remote Outdoor Sensor (optional): BAYSEN01ATEMPA
PWM Circuit (BK terminal): controls indoor unit variable speed blowers
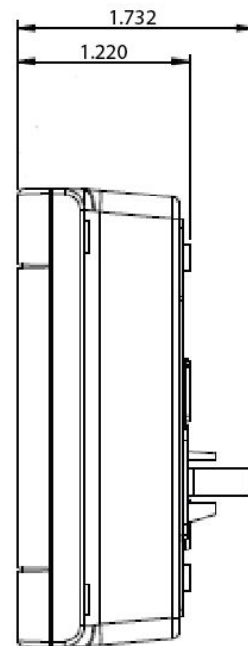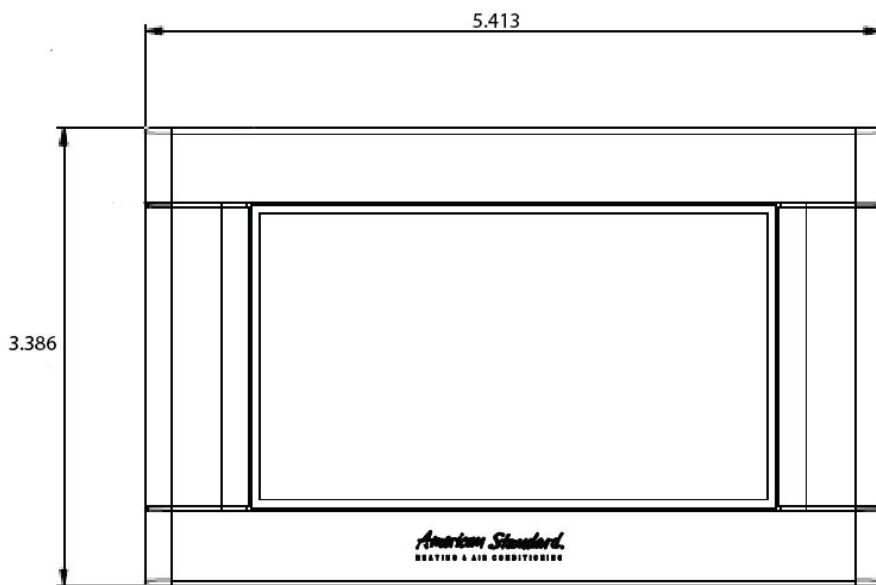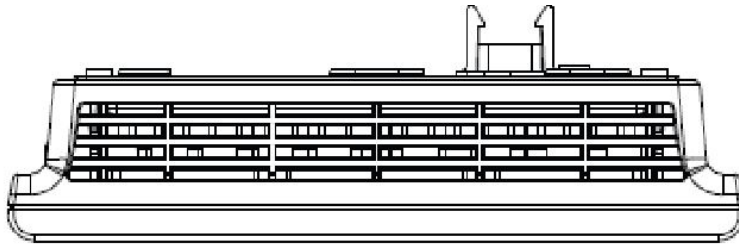
Product Data

American Standard
Model: ACONT824AS52DA
Name: Gold 824

Outline Drawing

Illustration of optional Ethernet connector (RJ-45 holder) included with control. Snaps into wall plate.

5.413

3.386

1.732

1.220

① Requires internet service and Nexia™ smart home system registration

Product Data

American Standard

Model: ACONT850AC52UA

Name: Platinum 850

Product Specifications

SPECIFICATION	DESCRIPTION
Dimensions	5.43"w x 3.39"h x 1.30"d
Touchscreen Display	4.15"w x 2.65"h (4.3" diagonal)
Communications	AccuLink™ 3-Wire Connection
Configurations	Heat Pump, Heat/Cool, Dual Fuel, Heat Only, Cooling Only
Maximum Number of Stages	5 Stages Heat, 2 Stages Cooling
Storage/Operating Temperature	-40°F to 175°F, 5% to 95% RH non-condensing
Input Power	24 VAC
Power Consumption	3VA typical, 7VA max
Wire Usage	18 AWG
System Modes	Auto, Heating, Cooling, Off, Emergency Heat
Fan Modes	Auto, On, Circulate
Auxilliary Heat Lockout	32°F to 70°F
Compressor Heat Lockout	5°F to 70°F
Cooling Setpoint Temperature Range	60°F to 99°F, 1°F resolution
Heating Setpoint Temperature Range	55°F to 90°F, 1°F resolution
Indoor Temperature Display Range	-40°F to 122°F
Outdoor Temperature Display Range	-40°F to 140°F
Indoor Humidity Display Range	0% to 100%, 1% resolution
Minimum Cycle Off Time Display	Compressor: 5 minutes, Indoor Heat: 1 minute

Features

- Wi-Fi (802.11 b/g/n) or Ethernet connection
- Control from a smartphone, tablet, or computer①
- NEXIA™ Z-Wave Bridge Inside
- Connect over 200 Z-Wave devices
- Geo Fencing①
- Nexia™Diagnostic's ready①
- Compatible with AccuLink™ II communicating systems
- Compatible with conventional 24 volt systems when used with relay panel BAY24VRPAC52**
- 7 Day programmable with up to six schedules per day
- Five day weather forecast, radar, and alerts①
- Indoor relative humidity display and enhanced dehumidification
- Test modes and alert diagnostics
- Upgradable software
- Silver/Gray color
- Wall Cover Plate BAYCOVR800A
- Limited Warranty: 5 year Base/10 year Registered

Application:

HVAC system compatibility:
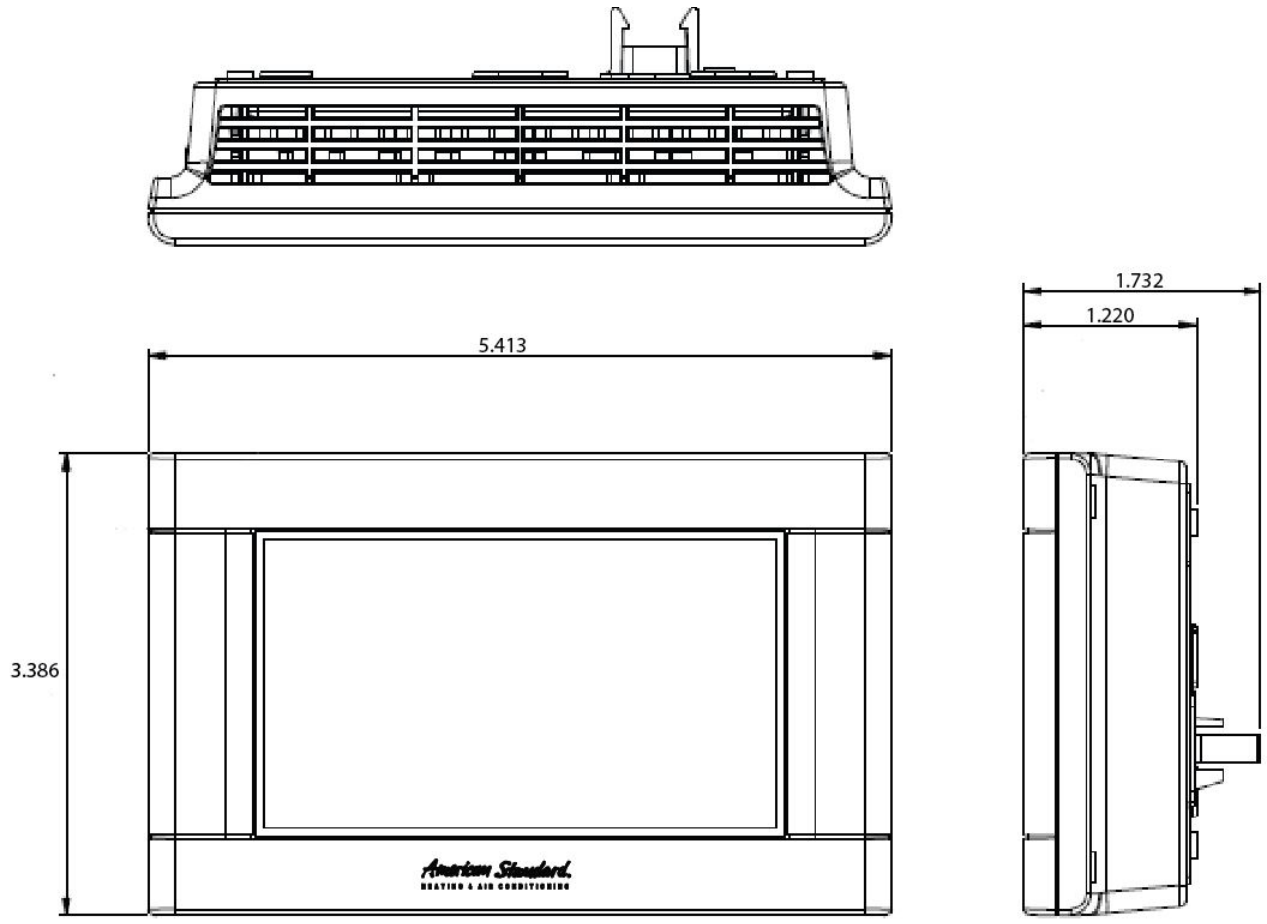AccuLink™ communicating systems (variable speed and two stage).
Conventional gas/electric, heat pump, dual fuel systems, or boilers (forced air only) requires relay panel BAY24VRPAC52**. Relay panel controls up to 5 stages heat, 2 stages cool, with remote indoor and outdoor temperature sensor connections, humidifier, whole-house dehumidifier and ventilation system.

Product Data

American Standard
Model: ACONT850AC52UA
Name: Platinum 850

Outline Drawing

Illustration of optional Ethernet connector (RJ-45 holder) included with control. Snaps into wall plate.

1.732

1.220

5.413

3.386

① Requires internet service and Nexia™ smart home system registration

Product Data

American Standard

Model: AZONE950AC52ZB

Name: Platinum 950

Product Specifications

SPECIFICATION	DESCRIPTION
Dimensions	7.3"w x 4.3"h x 1.20"d
Touchscreen Display	6.1"w x 3.6"h (7" diagonal)
Communications	AccuLink™ 3-Wire Connection
Configurations	Heat Pump, Heat/Cool, Dual Fuel, Heat Only, Cooling Only
Maximum Number of Stages	5 Stages Heat, 2 Stages Cooling
Storage/Operating Temperature	-40°F to 175°F, 5% to 95% RH non-condensing
Input Power	24 VAC
Power Consumption	5VA typical, 7VA max
Wire Usage	18 AWG
System Modes	Auto, Heating, Cooling, Off, Emergency Heat
Fan Modes	Auto, On, Circulate
Auxilliary Heat Lockout	32°F to 70°F
Compressor Heat Lockout	5°F to 70°F
Cooling Setpoint Temperature Range	60°F to 99°F, 1°F resolution
Heating Setpoint Temperature Range	55°F to 90°F, 1°F resolution
Indoor Temperature Display Range	20°F to 119°F
Outdoor Temperature Display Range	-31°F to 119°F
Indoor Humidity Display Range	0% to 99%, 1% resolution
Minimum Cycle Off Time Display	Compressor: 5 minutes, Indoor Heat: 1 minute

Features

- Wi-Fi (802.11 b/g/n)
- Control from a smartphone, tablet, or computer[1]
- Compatible with AccuLink™ communicating systems
- Compatible with conventional 24 volt HVAC systems (requires BAY24VRPAC52**)
- Nexia™ compatible and Geo Fencing[1]
- 7 Day programmable with up to 6 schedules per day
- Five day weather forecast, radar and alerts[1]
- Indoor relative humidity display
- Control up to 3 accessory devices with relay panel model BAY24VRPAC52**
    - Whole house humidifier, dehumidifier or ventilation system
- Test modes and diagnostic screens
- Nexia™ Diagnostics Ready[1]
- Upgradeable software
- Silver/Gray color
- Limited Warranty: 5 year Base/10 year Registered

Application:

HVAC system compatibility:

AccuLink™ communicating systems (variable speed and two stage).

Conventional gas/electric, heat pump, dual fuel systems, or boilers (forced air only) requires relay panel BAY24VRPAC52**. Relay panel controls up to 5 stages heat, 2 stages cool, with remote indoor and outdoor temperature sensor connections, humidifier, whole-house dehumidifier and ventilation system.
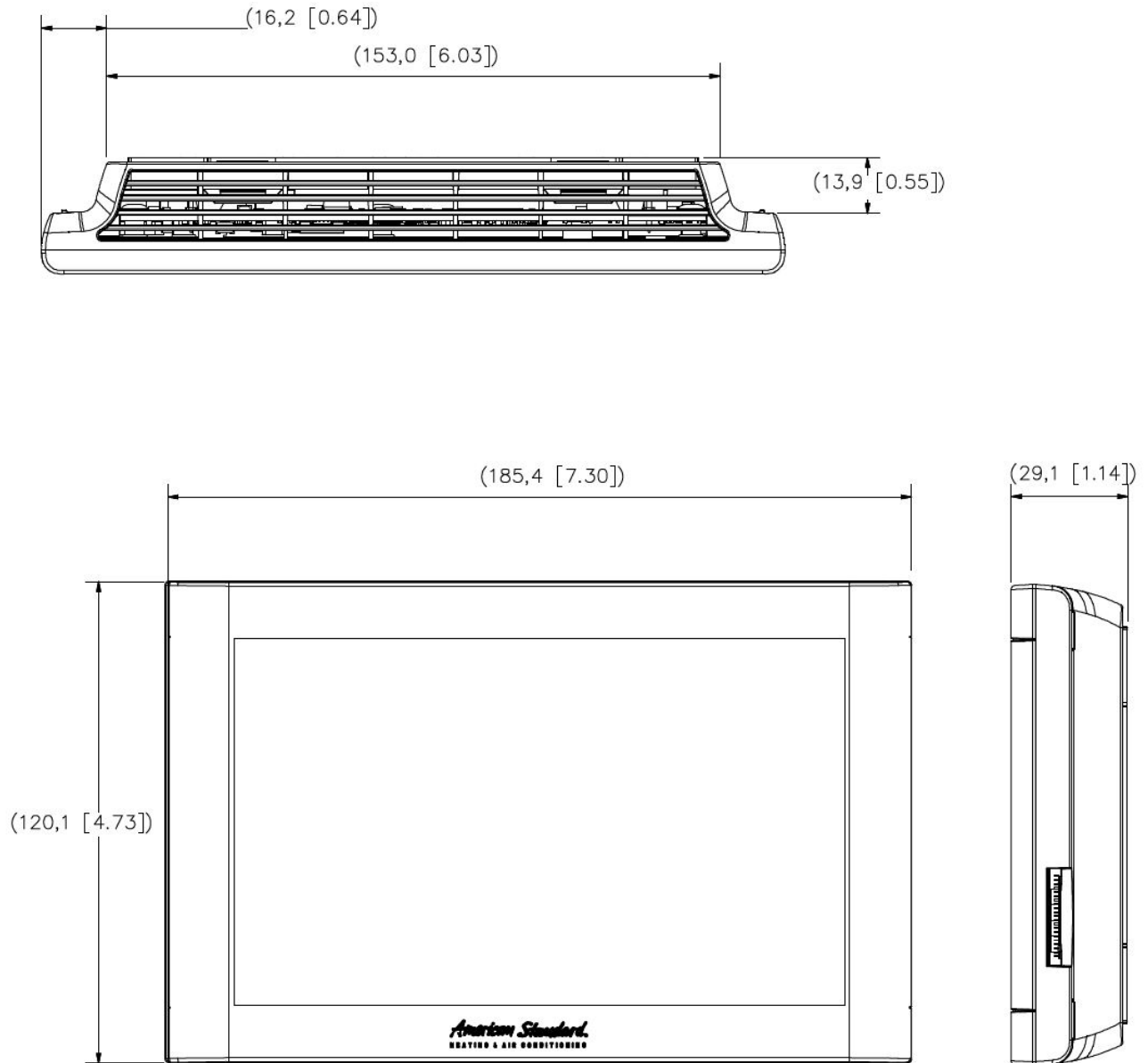
Product Data

American Standard
Model: AZONE950AC52ZB
Name: Platinum 950

Outline Drawing

(16,2 [0.64])

(153,0 [6.03])

(13,9 [0.55])

(185,4 [7.30])

(29,1 [1.14])

(120,1 [4.73])

American Standard
HEATING & AIR CONDITIONING

① Requires internet service and Nexia™ smart home system registration

Product Data

American Standard
Model: AZON1050AC52ZA
Name: Platinum 1050

Product Specifications

SPECIFICATION	DESCRIPTION
Dimensions	7.3"w x 4.3"h x 1.20"d
Touchscreen Display	6.1"w x 3.3"h (7" diagonal)
Communications	AccuLink™ 3-Wire Connection
Configurations	Heat Pump, Heat/Cool, Dual Fuel, Heat Only, Cooling Only
Maximum Number of Stages	5 Stages Heat, 2 Stages Cooling
Storage/Operating Temperature	-40°F to 175°F, 5% to 95% RH non-condensing
Input Power	24 VAC from HVAC System (Range: 18-30 VAC)
Power Consumption	3W typical, 4.7W max
Wire Usage	18 AWG NEC approved control wiring
System Modes	Auto, Heating, Cooling, Off, Emergency Heat
Fan Modes	Auto, On, Circulate
Auxilliary Heat Lockout	32°F to 70°F
Compressor Heat Lockout	5°F to 70°F
Cooling Setpoint Temperature Range	60°F to 99°F, 1°F resolution
Heating Setpoint Temperature Range	55°F to 90°F, 1°F resolution
Indoor Temperature Display Range	20°F to 119°F
Outdoor Temperature Display Range	-40°F to 135°F
Indoor Humidity Display Range	0% to 99%, 1% resolution
Minimum Cycle Off Time Display	Compressor: 5 minutes, Indoor Heat: 1 minute

Features

- Wi-Fi (802.11 b/g/n) or Ethernet connection
- Control from a smartphone, tablet, or computer[1]
- Nexia™ Z-Wave Bridge Inside
- Connect over 200 Z-Wave devices
- Geo Fencing[1]
- Nexia™ Diagnostics ready
- Compatible with AccuLink™ communicating systems
- Compatible with conventional 24 volt systems when used with relay panel BAY24VRPAC52**
- Zoning ready - requires zone panel(s), zone controls and dampers purchased separately
- 7 Day programmable with up to four schedules per day
- Five day weather forecast, radar, and alerts[1]
- Indoor relative humidity display and enhanced dehumidification
- Test modes and alert diagnostics
- Upgradable software
- Designer silver metallic color
- Limited Warranty: 5 year Base/10 year Registered

Application:

HVAC system compatibility:
AccuLink™ communicating systems (variable speed and two stage).
Conventional gas/electric, heat pump, dual fuel systems, or boilers (forced air only) requires relay panel BAY24VRPAC52**. Relay panel controls up to 5 stages heat, 2 stages cool, with remote indoor and outdoor temperature sensor connections, humidifier, whole-house dehumidifier and ventilation system.
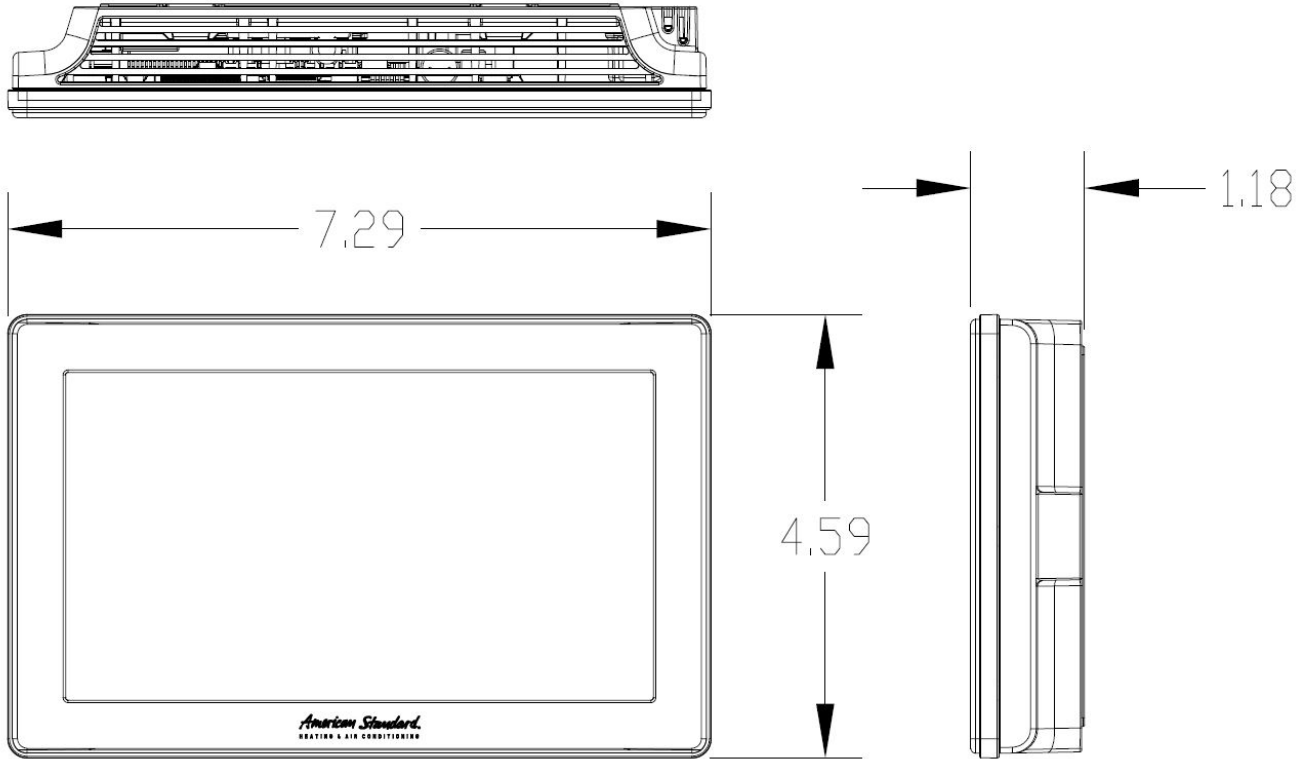
Product Data

American Standard
Model: AZON1050AC52ZA
Name: Platinum 1050

Outline Drawing

① Requires internet service and Nexia™ smart home system registration

American Standard

HEATING & AIR CONDITIONING

About American Standard Heating and Air Conditioning
American Standard has been creating comfortable and affordable living environments for more than a century. For more information, please visit www.americanstandardair.com.