Connect with your space

A complement to any room, the Reliable Controls® SMART-Sensor™ LCD (SS-L) delivers a communicating sensor solution that allows you to connect with up to ten configurable parameters related to your space.

Better by design

TECH SPECS

Supply Voltages (from controller)
- SS-L - 5 VDC @ 5 mA
- -IO option adds 10 mA
- -CO2 option adds 2 mA
- -BL option adds 10 mA
- -OC option adds 0.2 mA

Display
- Four 16 mm ($^5/_8$") digits, Six 8 mm ($^5/_{16}$") characters
- Six icons: Auto, Manual, Cool, Heat, Fan, and Fan Speed
- Display Area 36 mm x 36 mm ($1\,^3/_8$" x $1\,^3/_8$")

Temperature Specifications
- 12-bit A/D converter
- Range: 0 °C to 40 °C (32 °F to 104 °F)
- 0.1 °C (0.18 °F) resolution
- User calibrated to ± 0.1 °C (0.18 °F) accuracy

Backlight (for -BL models)
- LED backlight (10mA)

CO$_2$ Sensor (for -CO2 models)
- Non Dispersive Infrared Optical Sensor
- 0–2000 ppm range
- Accuracy ±50 ppm
- Automatic calibration built in
- Non Linearity < 1% of full scale
- Power: adds 2 mA to the base SS-L

Degree °C/°F switch (for -D models)
- Toggles LCD units between °C and °F

Humidity Range (for -H models)
- 0.1% display resolution
- 10–90% range
- ± 1.8% RH accuracy

Inputs
- Dedicated temperature sensor
- 2 thermistor or dry contact (on -IO models)

Outputs (for -IO models)
- 2 binary TRIAC
- 24 VAC @ 0.5 A

Occupancy Sensor (for -OC models)
- Passive Infrared Radiation (PIR) sensor
- 64 detection zones
- 100° horizontal range / 82° vertical range
- 5 m (16.4 ft.) max. detection distance

Buttons
- 3 custom silicone rubber buttons
- Button functions: select, plus, and minus

Wiring Terminals
- 14 to 26AWG (2.08 mm² to 0.13 mm²)
- Stranded or solid core
- Copper conductors only

Dimensions
- Base model:
  12 cm L x 7 cm W x 2.4 cm H
  ($4\,^3/_4$" L x $2\,^3/_4$" W x $^{15}/_{16}$" H)
- CO2 model:
  12 cm L x 7 cm W x 3.2 cm H
  ($4\,^3/_4$" L x $2\,^3/_4$" W x $1\,^1/_4$" H)

Weight
- 0.1 kg (0.22 lb.)

Ambient Limits
- Operating: 0 °C to 40 °C (32 °F to 104 °F)
- Shipping: -40 °C to 60 °C (-40 °F to 140 °F)
- Humidity: 10% to 90% RH non-condensing

FEATURES

Aesthetic Design
- Smooth contoured lines
- Slim profile

Easy Programming
- 10 programmable display points (e.g. inputs, outputs, or variables)
- Up to 7 points can be displayed on the screen at once
- Values can be programmed for adjustment by the user, or display only
- Point 1 and any one of the 10 SS-L points can be configured to display on the home screen simultaneously
- Dedicated LCD icons for display of: Auto, Manual, Cool, Heat, Fan, and Fan Speed

Large Liquid Crystal Display
- Displays time, analog, or digital values
- Optionally configured to blank its display after 10 seconds of idle time

Connection & Addressing
- Configure network address of SS-L using front buttons in address tool mode
- Valid addresses are 1–16
- Easy 4 or 6 wire connection (six wire required for use with X-Port-2™)

Built-in Configuration Tools
- User enabled configuration tools allow an operator to conveniently view and adjust setup parameters of SS-L and host controller

Network Access
- An RJ-11 connector on the bottom provides access to the host network (X-Port-2 required)

Optional Backlight
- LED lights up LCD screen while buttons are in use, then turns off after 10 seconds of inactivity

Optional CO$_2$
- 0–2000 ppm ±50 ppm NDIR sensor

Optional °C/°F switch
- Change temperature display units instantly

Optional Humidity
- Accurate onboard humidity sensor

Optional I/O
- Up to 2 thermistor or dry contact inputs, and up to 2 digital TRIAC outputs

Optional Occupancy
- Extremely compact sensor, ideal for detecting the motion of a person up to 5 m (16 ft.) away

Warranty
- 5 years
- 1 year for humidity sensor and CO$_2$ sensor

Certification
- FCC CFR 47 Part 15/B

2005 AHR EXPO®
INNOVATION AWARDS
Value Impact Application
Honorable Mention

ORDERING

SS-L (base model)
- SMART-Sensor with LCD and onboard thermistor, warm grey colour

Options
- -BL adds backlight and transflective LCD
- -CO2 adds CO$_2$ sensor
- -D adds °C / °F slide switch to toggle display units
- -H adds humidity sensor
- -IO adds 2 inputs and 2 TRIAC outputs
- -OC adds occupancy sensor
- /W for white enclosure (e.g. SS-L-H-OC/W)

See submittal sheet for more detailed ordering options

Accessories

SS-DC-B
- SMART-Sensor data cable base

SS-DC-C
- SMART-Sensor data cable

SS-DP
- Smart-Sensor duplex plug

SS-RJ11TB-B
- RJ11 to terminal block base

SS-RJ11TB-C
- RJ11 to terminal block cable
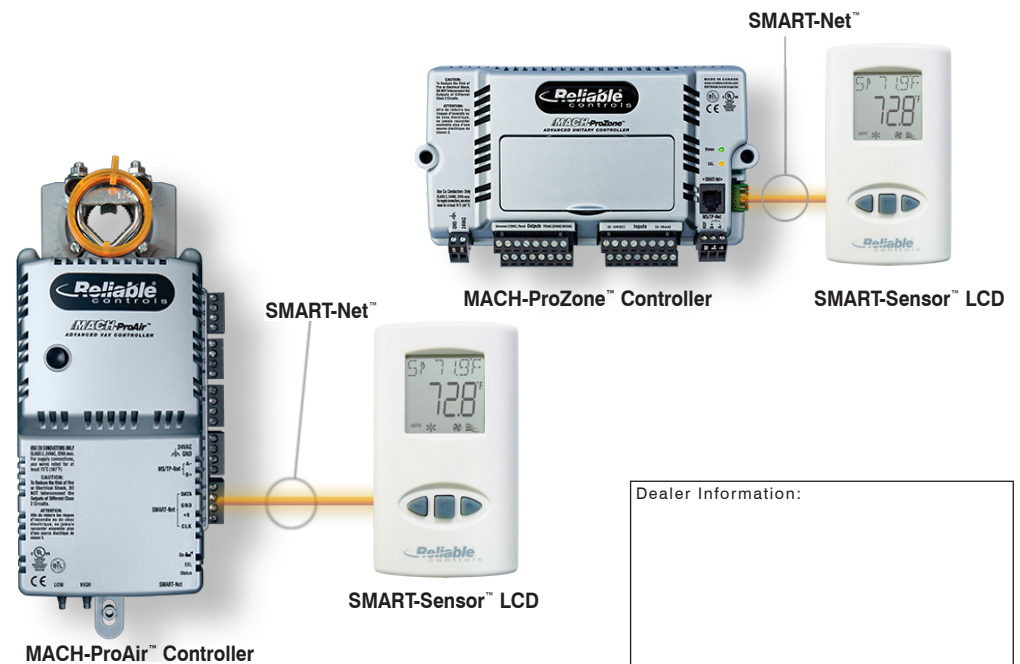
SS-VC-B
- SMART-Sensor voice cable base

SS-VC-C
- SMART-Sensor voice cable

SS-X
- Smart-Sensor expansion board

APPLICATION DIAGRAM

SMART-Net™

MACH-ProZone™ Controller

SMART-Sensor™ LCD

SMART-Net™

SMART-Sensor™ LCD

MACH-ProAir™ Controller

Dealer Information:

Designed and Manufactured in Canada