

### PRODUCT OVERVIEW



The X-22s has eight precision analog inputs that can be configured for various voltage ranges and 4-20mA sensors. The X-22s employs a 16-bit SAR A/D converter and can make both single or differential input measurements.

A 5.0V reference output can be used to power potentiometers or other resistance sensing sensors. The X-22s is ideal for measuring precision analog voltages in industrial environments.

One or more X-22s expansion modules can be connected to an X-400 controller with a ribbon cable. The ribbon cable provides both power and communications to the expansion modules.

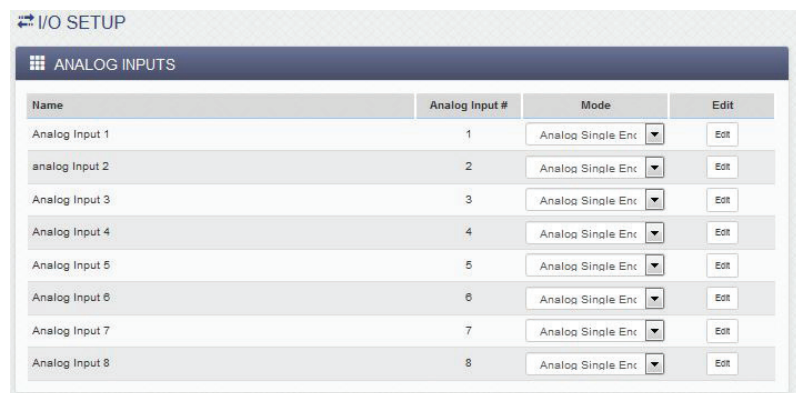
### Features:

- Eight precision analog inputs
- Input Voltage Ranges:
  - $\pm 1.28V$ ,  $\pm 2.56V$ ,  $\pm 5.12V$ ,  $\pm 10.24V$ , 4-20mA
- Removable terminal connector
- Powered through expansion bus - no separate power supply connections are required
- High input impedance
- Great for monitoring applications including:
  - Temperature
  - Electrical Current
  - Pressure
  - Fluid Levels
  - and much more...

Other expansion modules with different I/O combinations are also available.



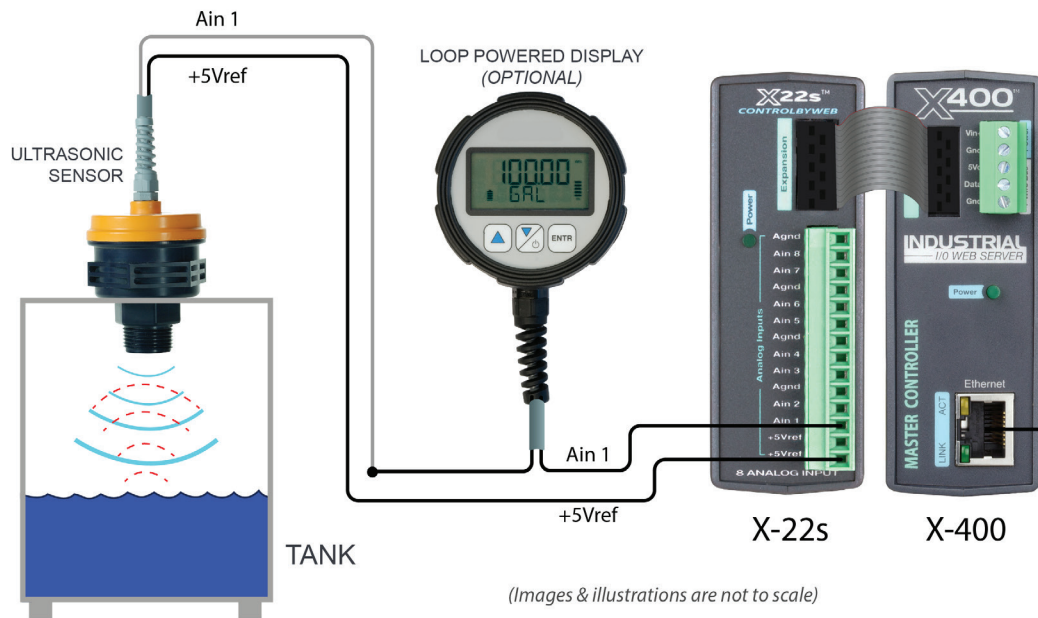
View X-22s inputs on the X-400's Dashboard



Editing I/O on the X-400

### APPLICATIONS & SPECS

#### Level Monitoring



#### Remote Location



(Images & illustrations are not to scale)

#### Models:

- X-22s

#### Power Requirements

- Voltage: 9-28 VDC (supplied via the X-400 controller, 24V recommended)
- Max Current: See table below for typical values at 25°C.

Power Supply	Current (Voltage mode)	Current (Current mode)
9 VDC	20 mA	750 mA
12 VDC	16 mA	555 mA
24 VDC	12 mA	285 mA

#### Analog Inputs

- Number of Inputs: 8
- Type: Single-ended, differential, 4-20mA (0-20mA), or a combination
- Input Range:  $\pm 1.28V$ ,  $\pm 2.56V$ ,  $\pm 5.12V$ ,  $\pm 10.24V$ , 4-20mA
- \*\*Note that inputs have high impedance so input range can easily be adjusted using external resistors. Example: 0 to 48 Volts
- Resolution: 16-bit, SAR

#### Reference Output

- Voltage: 5.00V
- Accuracy: 0.04%
- Temperature Coefficient: 3ppm/°C Max
- Current: 25mA max\*
- \*Maximum current from the reference may be increased if the environmental temperature is decreased. See users manual for more information.

#### Connectors

- Inputs: 14-Position, 3.81mm, Removable
- Expansion Connector: Ribbon cable, 10-conductor, polarized, 2x5-position, 0.100" pitch Provides power and communications for expansion modules (Communications: RS-485)

#### LED Indicators

- Number of LEDs: 1
  - Power on

#### Physical

- Size:
  - 1.41in (35.7mm) wide
  - 3.88in (98.5mm) tall
  - 3.1in (78mm) deep (not including connector)
- Weight: 5 oz. (142 g)
- Enclosure Material: Lexan 940 Polycarbonate Plastic
- Enclosure Flame Rating: UL94 V0

#### Environmental

- Operating Temperature\*: -40°C to 65.5°C (-40°F to 150°F)
- Storage Temperature: -40°C to 85°C (-40°F to 185°F)
- Humidity: 5-95%, non-condensing
- Indoor use or NEMA-4 protected location
- \*Max operating temperature may be increased at the expense of current through the 5V reference. See the

X-22s users manual for more details.

#### Electromagnetic Compliance

- IEC CISPR 22, CISPR 24
- FCC 47CFR15 (Class B)
- EN55024 ITE Immunity (2010)
- EN55022 Emissions (2010)

