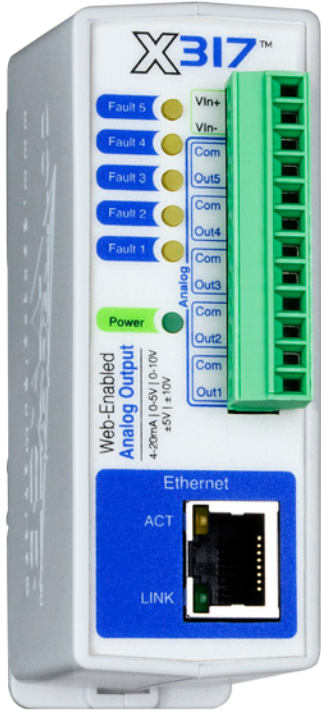


## PRODUCT OVERVIEW



The X-317™ is a web-enabled analog output module with five output channels. The analog outputs are similar to that of a Programmable Logic Controller (PLC). However, unlike a PLC, the X-317 is designed for web-based applications from the ground up. No add-on software or hardware is required.

The X-317 can be fully configured, programmed, and tested using its built-in web server. The web setup pages are intuitive and easy-to-use and do not require special programming skills.

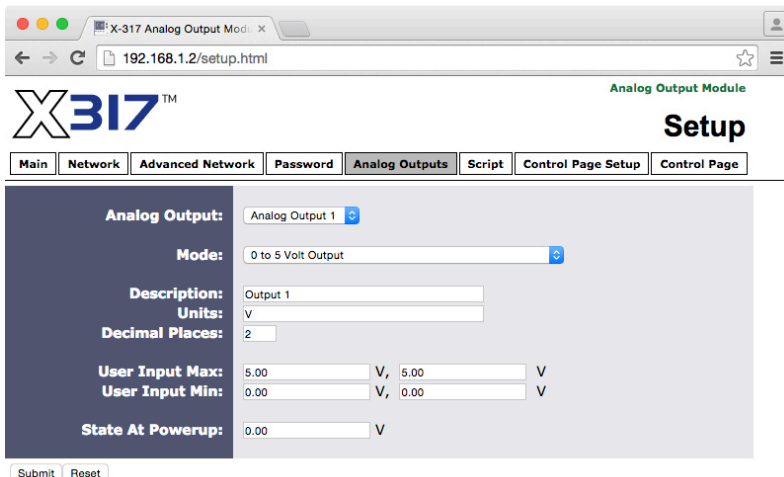
The X-317 can be used as a stand-alone device or can operate as a peripheral for other devices such as a programmable logic controller (PLC) or the X-600M™.

The X-317 has five precision 16-bit digital to analog converters (DACs). Each channel can be programmed for 0-5V, 0-10V, ±5V, ±10V, 4-20mA ranges. The voltage and current outputs for each channel are on a single connector terminal,.

Most industrial analog applications require isolation between the power supply and analog outputs. The X-317 has a built-in DC-DC converter for providing isolated power to the outputs. No external isolated back plane power is needed.

The built-in web setup pages allow the name and settings for each channel to be configured. You can configure the range of a setting to be in engineering units. For example, an input value of 0 to 100% can be scaled and processed for an output range of 4 to 20mA to control a damper motor.

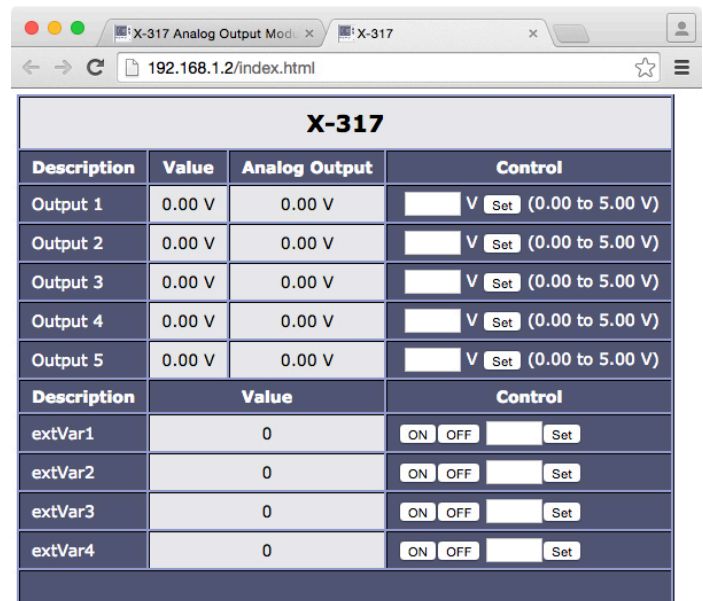
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Analog Output Configuration Tab

## Features:

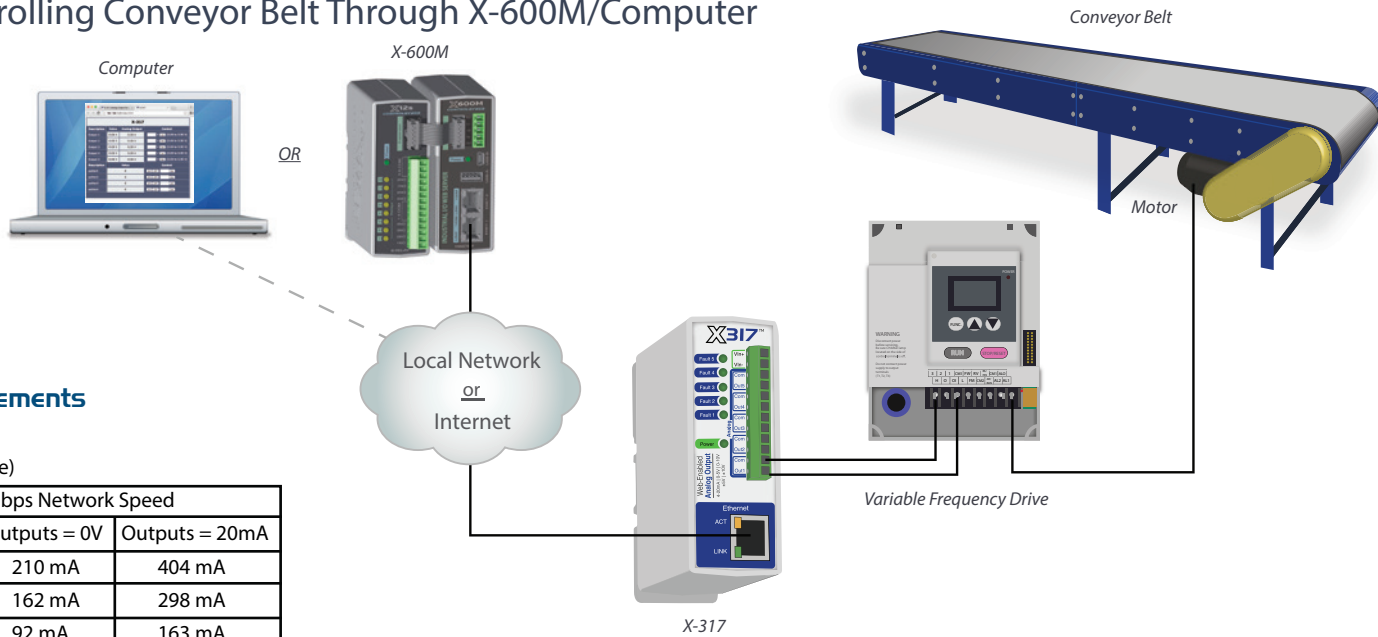
- Built with:
  - Industrial grade components
  - High-reliability SLC flash
  - Transient protection
  - Watchdog timers
  - Voltage supervisor circuitry, etc.
- Five separate analog output channels
- 0-5V, 0-10V, ±5V, ±10V, 4-20mA output ranges
- Outputs are software configured, independently programmable, and scalable
- Built-in isolated DC-DC converter
- Wide power supply range (9-28VDC)
- No special software or device drivers required
- Built-in password protected web setup and control pages
- Static or DHCP IP address configuration
- XML, Modbus TCP/IP, & SNMP interface options
- Field updatable
- Removable terminal connector
- Rugged DIN-Rail/wall-mountable enclosure



X-317 Control Page

### APPLICATIONS & SPECS

#### X-317 Controlling Conveyor Belt Through X-600M/Computer



#### Models:

- X-317-I

#### Power Requirements

- Voltage: 9-28VDC
- Max Current: (table)

10 Mbps Network Speed		
Power Supply	Outputs = 0V	Outputs = 20mA
9 VDC	210 mA	404 mA
12 VDC	162 mA	298 mA
24 VDC	92 mA	163 mA

100 Mbps Network Speed		
Power Supply	Outputs = 0V	Outputs = 20mA
9 VDC	302 mA	498 mA
12 VDC	229 mA	368 mA
24 VDC	126 mA	198 mA

#### Analog Inputs

- Number of channels: 5 (Individually configurable)
- Output Ranges: 0-5V, 0-10V, ±5V, ±10V, 4-20mA (software selectable)
- Resolution: 16-bit DAC (0-65535)
- Linearity Error: ±1-count, monotonic DAC
- Current Output (Voltage Mode): 10mA max (min load = 1K), 30mA max short circuit
- Voltage Output Inaccuracy: ±0.2% FSR includes offset error, gain error and non-linearity error, -40 to 65°C
- Max Load Capacitance: 20nF (no load), 5nF (1K load)
- Current Output Range: 4-20mA
- Current Output Inaccuracy: ±0.2% FSR includes offset error, gain error and non-linearity error, -40 to 65°C
- Output Compliance Voltage: 11.50V min (max loop voltage)
- Isolated Power Supply: Internal DC-DC converter
- Isolation: Galvanic, 1500 VAC
- ESD Protection: Integrated 15kV protection (IEC61000-4-2)
- Output Protection: Integrated over-temperature, open-line and short circuit protection
- Output Alarms: Open current loop, high internal temperature
- Load Type: Grounded, COM of all 5-channels are connected together
- Output at power up: Programmable

#### Network

- Type: 10/100 Base-T Ethernet Port
- Setup: Static IP address assignment or DHCP, HTTP port selectable

#### NONVOLATILE MEMORY

- All user settings are stored in nonvolatile memory. Settings will not be lost when power is disconnected.

#### Connectors

- Power, & Outputs: 12-Position, 3.81 mm, Removable
- Network: 8-pin RJ-45

#### LED Indicators

- Number of LEDs: 8
  - Power on
  - Fault condition (channels 1-5)
  - Network linked
  - Network activity

#### Physical

- Operating Temperature: -40°F to 150°F (-40°C to 65.5°C)
- Storage Temperature: -40°F to 185°F (-40°C to 85°C)
- Size:
  - 1.41 in (35.7mm) wide
  - 3.88 in (98.5mm) tall
  - 3.1 in (78mm) deep (not including connector)
- Weight: 4.8 oz (136 g)
- Enclosure Material: Lexan 940 Polycarbonate Plastic
- Enclosure Flame Rating: UL94 V0

#### Protocols

- HTTP, XML, Modbus TCP/IP

#### Password Settings

- Password protection on setup page: Yes
- Password protection on control page: Optional
- Password Encoding: Base 64
- Max Password Length: 13 Characters

#### Electromagnetic Compliance

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