

# STC-X CONTROLLER

Motion Controller and Ultrasonic Instrument



# CONTROLLER

## ENGINEERED FOR TOUGH INSPECTIONS. DESIGNED FOR CONTROL.

The ScanTech STC-X Controller brings motion control and ultrasonic instrumentation together in one compact, field-ready unit. Built for ScanTech automated scanner systems, it supports joystick steering, B-scan and C-scan data acquisition through Analyst X™ and Analyst XR™ software, emergency stop control, onboard diagnostics, and reliable connectivity — all housed in a durable case designed for demanding inspection environments.

# X CONTROLLER



The ScanTech STC-X Controller serves as the hardware hub for ScanTech automated inspection systems, bringing scanner movement, ultrasonic signals, power delivery, and encoder feedback into one coordinated platform. Built for field and shop use, it supports controlled scanner performance, reliable data communication, and quick system status awareness throughout the inspection process.

## TECHNICAL INFORMATION

<b>POWER REQUIREMENT</b>	12–24 VDC / 240 W Max
<b>AC POWER SUPPLY</b>	90–240 VAC / 280 W
<b>DIMENSIONS</b>	9.25 x 12.75 x 7.5 in / 235 x 324 x 191 mm
<b>WEIGHT</b>	11 lbs / 5 kg
<b>DATA INTERFACE</b>	Gigabit Ethernet
<b>OUTPUTS</b>	Scanner Control, Scanner Power, Isolated Encoder Signals
<b>LED INDICATORS</b>	Power Rails, Onboard Processor Status
<b>E-STOPS</b>	Controller Panel, XR Scanner Bulkhead
<b>INTERNAL COOLING</b>	63 cfm
<b>MOTION FUNCTIONALITY</b>	Backlash Compensation, Pulse-on-Position Triggering, Closed-Loop Servo Control
<b>MOTOR DRIVES</b>	4 Axis Servo with Proprietary Low EMI Outputs

## FEATURES

- ✔ **Integrated UT + Motion Control**  
 Combines ultrasonic instrumentation, scanner control, scanner power, and encoder signal handling in one compact unit.
- ✔ **B-Scan + C-Scan Software Support**  
 Runs with Analyst X™ for B-scan inspection and Analyst XR™ for C-scan corrosion mapping workflows.
- ✔ **Joystick X-Series Compatible**  
 Pairs with ScanTech's Joystick X-Series for responsive scanner steering and operator control.



JOYSTICK X-SERIES

## ULTRASONIC INSTRUMENTATION

<b>PULSE VOLTAGE</b>	200 V	<b>FILTERING</b>	1–30 MHz LPF
<b>PULSE TYPE</b>	Square Wave	<b>PROBE MODES</b>	Single, Dual, Through Transmission
<b>PULSE WIDTH</b>	8–500 ns	<b>MEASUREMENT MODES</b>	Peak, Flank, Zero Crossing, Time Distance, Echo-to-Echo, Amplitude
<b>GAIN</b>	88 dB Analog / 24 dB Digital	<b>SIGNAL DISPLAY</b>	RF, Full Rectified, +V, -V
<b>SAMPLE RATE</b>	100 MHz	<b>CHANNELS</b>	Single or Dual Channel
<b>ANALOG BANDWIDTH</b>	30 MHz	<b>SOFTWARE DRIVERS</b>	None Required