

25x86 Logic Processor

Intelligent Data Acquisition and Control

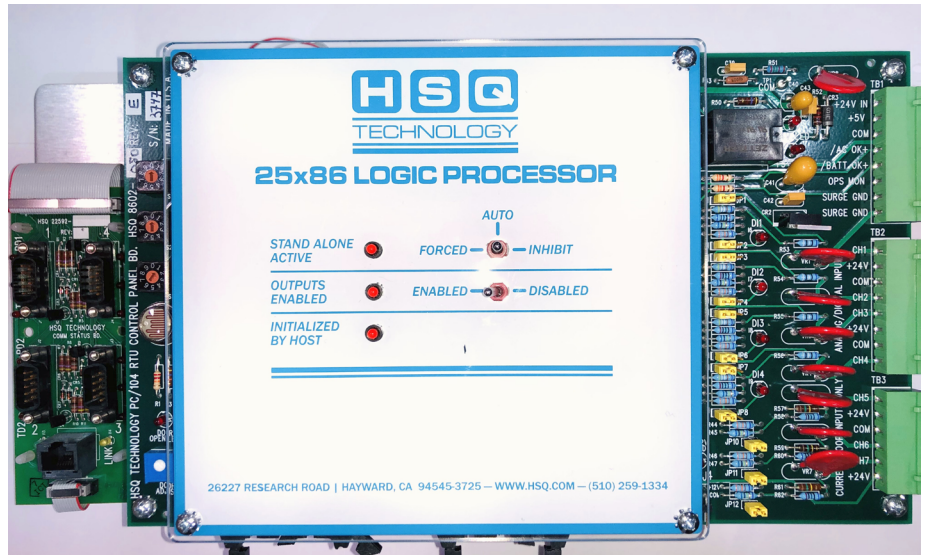
Models: Standard and Low Power



Key Features

- ◇ Industrial Processor
- ◇ Distributed Alarm and Data Processing
- ◇ Sequence of Events (SOE) Buffering
- ◇ Synchronized Real-Time Clock
- ◇ Intelligent Stand Alone Control
- ◇ VisualCL (Graphical Control Logic)
- ◇ IP LAN/WAN Support
- ◇ IEEE 802.3 10/100 Ethernet
- ◇ Backup Power Supply Option
- ◇ Modbus Master and Slave Capability
- ◇ DNP3 Master and Slave Capability
- ◇ DIN Rail Mounting Option
- ◇ Low Power Option

Technical Summary



The Model 25x86 Logic Processor Stack is an x86-based data acquisition and control computer intended for a wide range of telemetry, SCADA, distributed automation, and facilities management applications. The 25x86 processor board provides software and communications compatibility with existing HSQ Model 2500/86 and Model 2500 Logic Processors.

Processor Boards

- **Processor Type/Speed:**
 - ◇ Standard/Low Power x86 1.0GHz
- **Memory:** 256 Mb SDRAM standard, expandable
- **Non-Volatile Memory:** 64 Mb CompactFlash standard, expandable
- **Real Time Clock:** Year, Month, Day, Hour, Minute, Seconds, and an On-Board Clock Battery
- **Watchdog Timer:** Automatic System Reset after Software Failure
- **Ethernet Interface:**
 - ◇ Standard Embedded 10/100, dual port configurable
 - ◇ Low Power Embedded 10/100, single port
- **Serial Ports:**
 - ◇ Standard Three RS-232 and One RS-232/422/485 standard, expandable, USB available
 - ◇ Low Power One RS-232 and One RS-232/422/485 standard, expandable, USB available
- **Master Protocol:** Allen Bradley DF1, ASI, MODBUS Master (Serial/TCP), DNP3 Master
- **Remote Protocol:** HSQ COS Protocol, MODBUS Slave (Serial/TCP), DNP3 Slave
- **PC/104 Connector:** 32-bit PC/104-Plus Bus

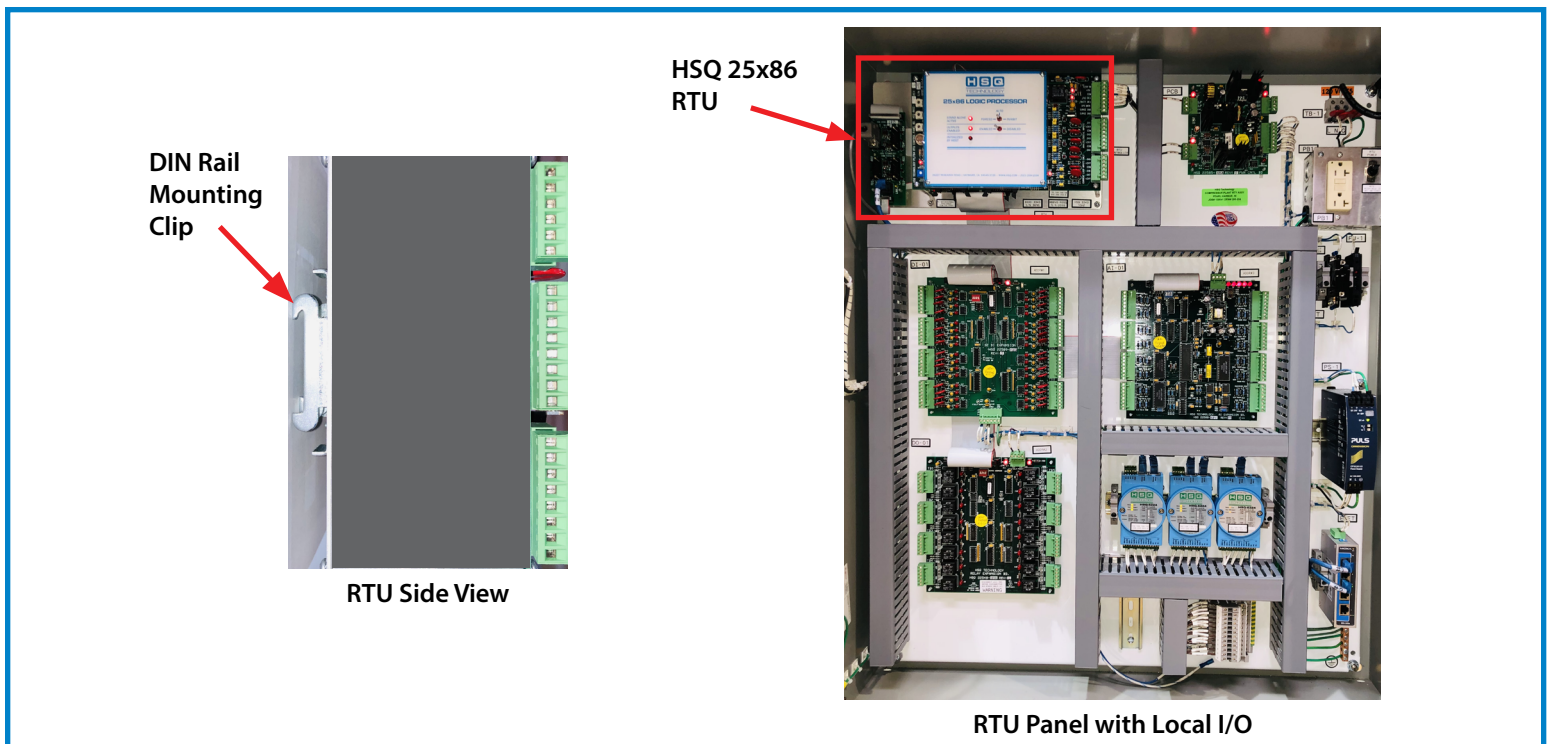
General

- **Logic Power:**
 - ◇ Standard 5 V_{DC}, 6 W
 - ◇ Low Power 5 V_{DC}, 3.7 - 4.4 W
- **Field I/O Power:** 24 V_{DC}, Power Consumption Varies by I/O Configuration
- **Temperature:**
 - ◇ Standard/Low Power 0° – 60° C (32° – 140° F) — Operating
- **Humidity:** 5-95% Relative Humidity, Non-Condensing
- **Dimensions:** 178 mm x 254 mm (7" H x 10" W) — Depth Varies According to Board Configuration
- **DIN Rail Mounting:** Fits standard DIN rails (35 mm)

HSQ 8602 Control Panel Board

- **Indicators:** Power, Stand Alone Active, Outputs Enabled, Initialized by Host, Door Open
- **Switches:** Stand Alone Mode (Forced/Auto/Inhibit), Outputs Enable/Disable
- **Embedded I/O:** 12 TTL Digital Inputs, 12 TTL Digital Outputs (compatible with HSQ AUX I/O Interface Boards
4 Analog Inputs, (4-20 mA, 0-1 mA, 0-5 V, 0-10 V) (Note: Configurable as 24 V_{DC} Digital Inputs)
3 Analog Inputs (4-20 mA, 0-1 mA)
- **I/O Expansion Bus Port:** 2500 Series I/O Expansion Boards, up to 25 boards, 832 points
- **Battery Voltage Monitor:** On-Board AI Monitors +24 V_{DC} Supply Voltage, Reads Battery Volts During Discharge
- **AC OK Monitor:** TTL from 2585 Power Control Board, indicates either AC Power or Battery being used
- **Battery OK Monitor:** TTL from 2585 Power Control Board, Indicates Defective Battery
- **Address Switches:** Unit Address, 1-999
- **Ops Monitor Relay:** 24 V_{DC}, 10 A Maximum
- **Door Alarm:** Photocell Activates Internal Alarm Point When Illuminated, Adjustable Threshold

The 25x86 Logic Processor Stack has been updated to be vastly more functional. It now features a larger baseplate and the ability for DIN rail mounting. This makes the 25x86 more versatile, allowing it to be placed anywhere and easily accessed or swapped out. The larger baseplate allows for direct mounting of the Model 2592 RS-232 COMM Status board.



2500 Series I/O Expansion Boards *

- **2507** — 4-Ch. Analog Output
- **2508** — 16/32-Ch. Analog Input
- **2509** — 32-Ch. Digital Input
- **2533** — 32-Ch. Digital Output
- **1368** — Digital Input Conversion – Left Entry †
- **2534** — 32-Ch. Intelligent Digital Input (SOE to one Millisecond)
- **2535** — 4-Ch. Digital Input to Analog Input Adapter Board
- **2548** — 16-Ch. Relay Digital Output Form C 10 Amp Relay
- **2569** — 16-Ch. Digital Input and 16-Ch. Digital Output
- **1369** — Digital Input Conversion – Right Entry †

HSQ 6000/6200 Series Remote I/O Modules *

- **HSQ-6015** — 7-Ch. RTD Input
- **HSQ-6017** — 8-Ch. Analog Input / 2-Ch. Digital Output
- **HSQ-6018** — 8-Ch. Thermocouple Input / 2-Ch. Digital Output
- **HSQ-6050** — 12-Ch. Digital Input / 6-Ch. Digital Output
- **HSQ-6051** — 12-Ch. Digital Input / 2-Ch. Digital Output
- **HSQ-6052** — 8-Ch. Digital Input / 8-Ch. Digital Output
- **HSQ-6060** — 6-Ch. Digital Input, 6-Ch. Relay
- **HSQ-6066** — 6-Ch. Digital Input, 6-Ch. Power Relay
- **HSQ-6217** — 8-Ch. Analog Input
- **HSQ-6224** — 4-Ch. Analog Output / 4-Ch. Digital Input
- **HSQ-6250** — 8-Ch. Digital Input / 7-Ch. Digital Output
- **HSQ-6256** — 16-Ch. Digital Output
- **HSQ-6260** — 6-Ch. Relay Output
- **HSQ-6266** — 4-Ch. Digital Input / 4-Ch. Relay Output

HSQ AUX I/O Interface Boards *

- **1046** — 8-Ch. Digital Input, 24 V_{DC}
- **1047** — 8-Ch. Digital Output, 24 V_{DC}
- **1332** — 8-Ch. Digital Output, Form C 10 Amp Relay
- **8646** — 12-Ch. Digital Input and 12-Ch. Digital Output, 24 V_{DC}

* **NOTE:** All Digital Inputs can be used as Counter Inputs.

† **NOTE:** For use with the 2509 and 2534 Expansion Boards.