# HSQ-1110 Logic Processor

## Intelligent Data Acquisition and Control

**HSQ TECHNOLOGY**

## Technical Summary
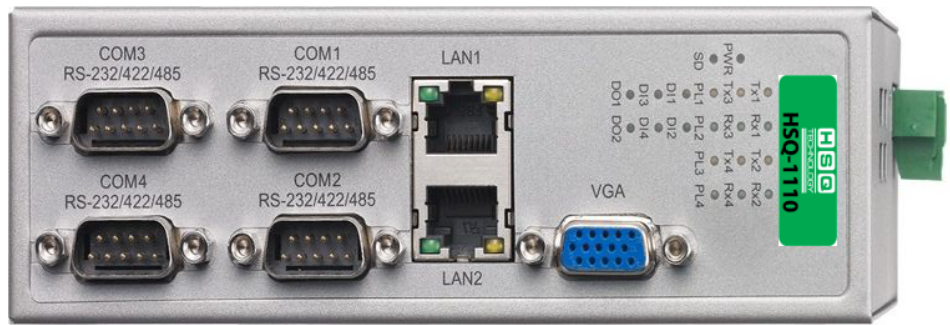
## Key Features

◇ Distributed Alarm and Data Processing
◇ Sequence of Events (SOE) Recording
◇ Data Buffering – Change of State (COS)
◇ Synchronized Real-Time Clock
◇ Intelligent Stand Alone Control
◇ VisualCL Programming
   (IEC 1131-3 Based)
◇ Backup Power Supply Option
◇ Fanless With No Internal Cabling
◇ Modbus Serial / TCP Communication
◇ Modbus Master and Slave Capability
◇ DNP3 Master and Slave Capability



Introducing the new HSQ-1110, it serves as a replacement for the obsolete HSQ 6000 series of RTUs. The HSQ-1110 provides two Ethernet ports, five serial ports, and two SD card slots. With its compact size, small footprint, and front accessible I/Os, this RTU is convenient for wiring and DIN-rail installation in control cabinets. Due to its wide operating temperature range and industrial serial port design, the HSQ-1110 is an excellent communication gateway for critical environments.

## General Specifications

- **Dimensions (W x H x D):** 50 x 154 x 127 mm (1.9 x 6.1 x 5 in.)
- **Enclosure:** Aluminum + SECC
- **Mountings:** DIN-rail, wallmount
- **Power Consumption:** 10 – 30 $V_{DC}$ (13 W)
- **Power Input:** AT, ground isolation, dual power inputs
- **Weight:** 0.45 kg (0.99 lbs.)

## Communications

- **Serial Ports:** Four RS-232/422/485 (COM3 & 4 optional isolation) Automatic RS-485 data flow control
- **Serial Port Speed:** RS-232: 300 – 115.2 kbps RS-422/485: 300 – 115.2 kbps (Max.)
- **LAN:** Two 10/100 Base-T, RJ-45 ports
- **USB:** Four USB ports, OpenHCI
- **Protocols:** HSQ CoS, Modbus, DNP3, ENCIP
- **Digital Input:** Four Digital Inputs Dry contact
- **Digital Output:** Two Digital Outputs (optional isolation) Open Collect to 30 V 200 mA max Load, Power Dissipation 450 mW

## System Hardware

- **CPU:** TI Cortex A8 AM3505 600 MHz
- **Memory:** 256 MB DDR2 Onboard
- **Display:** DB15 VGA connector up to 1024 x 768
- **Indicators:** Power, Serial (Tx, Rx), SD Four DI, Two DO Four Programmable LEDs
- **Storage:** Two SD card slots

## System Software

- **Operating System:** HSQ v8 (Pre-installed)

## Environment

- **Operating Temperature:** -10 – 70º C (14 – 158º F)
- **Storage Temperature:** -40 – 80º C (-40 – 176º F)
- **Operating Humidity:** 20 – 95% (non-condensing)
- **Storage Humidity:** 0 – 95% (non-condensing)
- **Shock Protection:** Half-sine wave, 30 G, 11 ms

## 6000/6200 Series I/O Modules

The HSQ-1110 integrates seamlessly with these modules:

**HSQ-6015, HSQ-6017, HSQ-6018, HSQ-6024, HSQ-6050, HSQ-6051, HSQ-6052, HSQ-6060, HSQ-6066, HSQ-6217, HSQ-6224, HSQ-6250, HSQ-6251, HSQ-6251, HSQ-6260,** and **HSQ-6266**.