



Product Overview

The Model 2600-020 AEI Reader is a dual microprocessor system specifically designed for the demanding environment of the rail industry. The 2600-020 is the future of AEI integration and was developed to interface with the latest Transcore Multiprotocol Rail Reader (MPRR).

The next generation AEI Reader features:

- Networked Reporting
- Multiple Reporting Sessions
- MPRR Compatibility
- Easy Data Transfer
- Rugged Construction
- Real-Time Data Collection



Main Assembly

The 2600-020 system is housed in a rugged and compact stainless steel cabinet with simple to understand system status indicators and processor reset switches on the sealed front panel. The Main Terminal block on the bottom of the enclosure provides terminals for the 2600-170 MRDI – Multiplexed Route Direction Indicator that tracks car movements beyond switches in a yard environment.

Power and function control switches are arrayed on the upper left and right sides of the enclosure along with a high decibel Sonalert, two USB ports and a connector for the 2600-180 Wireless Transducer Calibration System.

Easy Maintenance

The system is designed for ease of setup and maintenance. All connections to the system are made with plug connections. All system configuration data can be readily moved to a replacement unit simply by moving the microdrive plugged into the USB port.



Updated Configuration

The Model 2600-020 AEI Reader is the next generation in the reliable Model 2600 family that has been in production for over 5 years, with over 300 systems in Class 1 service worldwide. Future ready MPRR integration, within the proven dual microprocessor architecture system, positions the Model 2600-020 as an easy choice for AEI solutions.

The Model 2600-020 is configured to easily integrate with the latest Transcore Multiprotocol Rail Reader (MPRR). A connector array along the bottom of the cabinet provides all external connectivity for the MPRR, serial device connections, IP modems, LAN and WAN networking, and peripheral device inputs.

Dual Microprocessors

The Model 2600-020 System has the proven dual microprocessor architecture of the original Model 2600 AEI Controller Module.

Front End Processor (FEP)

Provides for all required real-time data collection and hardware interface to peripheral devices like wheel detectors, presence detectors, switch position monitors, AC power monitor and the Transcore MPRR. The FEP is designed to operate over a temperature range of -40 to + 70C.

Industrial PC (IPC)

A ruggedized single board PC built to industrial specifications by VersaLogic. The IPC processes raw real-time data collected by the FEP. The Linux operating system provides advanced processing capabilities such as:

- Clean List Development
- S-918 Consist Reporting
- S-918 Maintenance Reporting
- Multi-Track Filter Logic
- LAN & WAN Networking
- Multiple Reporting Sessions
- Remote Software Update
- Serial & IP Connectivity



General Specifications

Operating Input Voltage	20 - 30 VDC @ 5 amps
Input Voltage Protection	Circuit Breaker + Self-restoring fuses on each
	processor and reader power supply
	Reverse polarity protected
Communications	External RS232 ports - 4 Internal RS232 ports - 3 RJ45 - Ethernet ports - 2
Temperature Spec Industrial	-40 + 70C Fan-less operation
Size	9.3" W x 15.4" H x 4.5" D
Weight	12 lbs.
Finish	White powder coat over stainless steel

Front End Processors / Interface

Manufacturer	Southern Technologies Corporation
Processor	Motorola 68HC11
Program Storage	512K Bytes - FLASH
Temporary Storage	512K Bytes - SRAM
Inputs	8 — Analog — Battery voltage, FP internal temp, outside temp, 3v, 5v, 12v power supply monitor 6 — Digital — Opto Isolated auxiliary, power fail, presence, test, spare 4 — Zero speed transducer — RF filtration and surge suppression
Outputs	2 — Digital — 24 volt relay drivers
Operating Temperature Range	-40 + 70C

Industrial PC

Manufacturer	VersaLogic
Architecture	Single board — PC104 Plus Expansion
Processor	AMD LX800
Operating System	Linux
Program storage / Data storage	Non-volatile Compact Flash — 1GB
Communications	Serial — Ethernet — TCP/IP
Operating Temperature Range	-40 + 70C

