Analysis of Machine Failure Modes in Real Time using I-7188EX and X100 Expansion Board

The machine failure data acquisition system designed by GEMTECH using ICP DAS USA Products detects failure at the precise moment a machine stops. The operator scans production stops and restarts the machine. Then the operator scans the type of stop and the time of production resumption through barcodes. The number of most significant stops is known automatically in real time for a large number of machines. The PARETO analysis is done in real time. The system automatically shows the duration of stops per type. It logs important information like the frequency of a given stop type over several months, as well as the gravity of each stop. The barcode scanners use the I-7188EX Embedded Controller in RS232 entry, and the NS-205 (5 Port Industrial Ethernet Switch) to network the barcode information.

USB to CAN Converter
I-7565: $295

8 Port Industrial 10/100 Mbps Ethernet Switch
NS-208: $145
I-7565 is an RoHS compliant solution that provides fast USB to CAN conversion for Factory, Building, Home, and Vehicle Automation or for Control and Monitoring systems.

**I-7565 Features:**
- Fully USB 1.1/2.0(Full Speed) Compliant
- Supports both CAN 2.0A and CAN 2.0B
- Power over USB
  - No External Power Required
- Has 20 Mhz Microprocessor inside
- Has Built-in Firmware
- Transmission Speed:
  - Up to 1 Mbps for CAN
  - 921.6 Kbps for USB
- Software Configurable CAN and USB Communication Parameters
- 1000M Maximum Transmission Distances
- Built-in jumper to select 120Ω terminal resister
- Mounts easily on DIN-Rail
- Has Power, Data Flow and Error Indicators
- Has Watchdog inside
- Supports Windows 98/ME/2000/XP drivers

NS-208 is fast, easy to use, and has reliable LAN dispersion. It is ideal in almost any setting! It has an MDI/MDIX function and automatically switches the transmission speed (10 Mbps or 100 Mbps) for corresponding connections. The flow control mechanism is negotiated. There are link/data rate LEDs for each port to aid troubleshooting. Port connectors are shielded RJ-45.

**NS-208 Features**
- Auto MDI / MDI-X crossover for plug-and-play
- Each port supports both 10/100 Mbps speed auto negotiation
- DIN rail mount for Industrial Usage
- Store-and-forward architecture
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- +10 ~ +30V DC voltage
- Operating temperatures: -30°C ~ +75°C

*Offer not valid for resellers and distributors.*