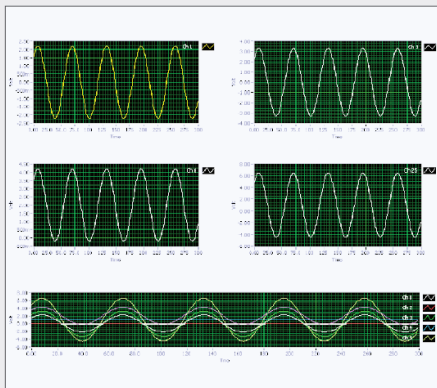
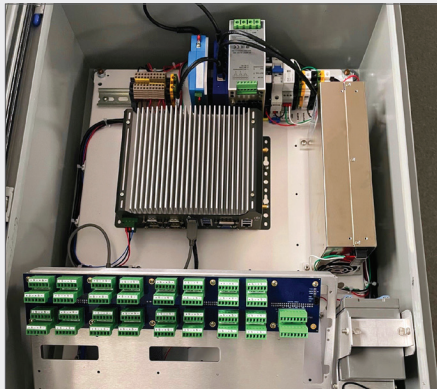


Structural Monitoring System (SMS)

General Purpose Structural Monitor & Machine Protection System



SYSTEM DESCRIPTION

4-20ma Structural Monitoring System with Data Collection, Alarming, Historical Trending and Data Storage. Accepts all sensors and signal sources using 4-20ma current loop.

FEATURES

- 64/128 /256 Channels Real Time - High Sampling Rate
- 4/8 Digital Outputs for Alarms
- 4/8 Digital Inputs
- Ethernet Communication for data transfer for Network and Control (Option for Wi-Fi, Cellular)
- Inputs - 4-20ma or Voltage, 2-wire, 3-wire
- NEMA 4 Enclosure for Indoor or Outdoor Installation
- Battery Backup (30 minutes)
- Lightning protection on all Inputs and Outputs

SMS SOFTWARE

SMS Software is configurable for Data Alarming and Trending Analysis. It is capable of sending alarm reports remotely via e-mail, with the Ethernet system fully integrated into control systems.

TRIGGER INPUT

Can be triggered by AE System alarm. Trigger causes data storage at high speed with programmable pretrigger.

CERTIFICATIONS



OPERATING SPECIFICATIONS

Analog Inputs

Input Channels..... 64 / 128 / 256
 Input Configuration Current or Voltage, factory set in groups of 8
 Current Input Ranges..... 20mA full scale (for use with 4-20mA current loops)
 Current Input Impedance..... 499 Ω
 Voltage Input Impedance 1 M Ω
 Maximum Safe Current Input Level ± 30 mA
 Maximum Safe Voltage Input Level ± 12 V
 Lighting Protection Class X

Digital Inputs

Input Channels..... 4/8
 Output Channels 4/8
 Logic Threshold, High Level..... > 2.0V
 Logic Threshold, Low Level..... < 0.8V
 Maximum Safe Input Level -0.5 to +5.5V
 ESD protected to 15kV

Measurement

Maximum Sample Rate..... 1000 samples per second, all channels active

Physical & Environmental

Size 30" x 20" x 10" NEMA 4
 Weight 45 lbs
 Operating Temperature..... -25°C to +50°C
 Storage Temperature..... -40°C to +80°C
 Relative Humidity... 20 to 90%, non-condensing, ...Operating 10 to 95%, non-condensing, Storage
 Input Voltage 88-264VAC, 47-63Hz
 Power Consumption..... 200W/400W Max.
 Output Power for Sensors..... +24V
 Maximum Total load 2A per 64ch
 Battery Backup 30 minutes

Supported Sensors

350 Ω strain (1/4, 1/2, full bridge) w/ separate signal conditioner 4-20mA output
 3 axis accelerometers 4-20mA output
 String potentiometers..... 8-40VDC input, 4-20mA output
 Humidity/temperature transmitter..... 12-40VDC input, 4-20mA output
 Inclinator - single axis..... 10-30VDC input, 4-20mA output
 LVDT linear position 15-28VDC input, 4-20mA or 0-10V output
 Laser distance meter 18-30VDC input, 4-20mA or 0-10V output
 Thermocouple..... Type K, 12-35V input, 4-20mA output
 RTD temperature..... 100 Ω , cylindrical probe