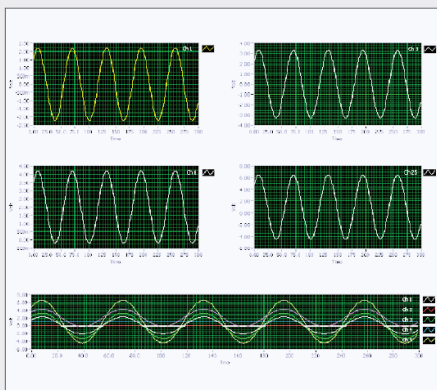
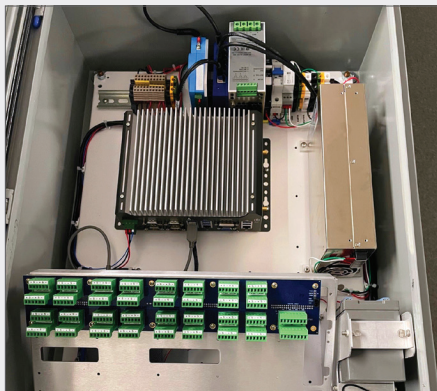


Structural Monitoring System (SMS)

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 MΩ
Maximum Safe Current Input Level	± 30mA
Maximum Safe Voltage Input Level	± 12V
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
Inclinometer - single axis.....	10~30VDC input,
.....	4-20mA output
LVDI 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.....	100Ω, cylindrical probe