

GT3966 SpyderNet Remote Machine Monitor

This low cost, high performance signal conditioning and logging unit is ideally suited to providing remote monitoring of many types of rotating machinery, including turbines, motors, pumps, fans, etc.



- Eight Channel Vibration or Process Monitoring
- Any Combination of ICP Accelerometer or 4 -20mA Current Loops
- Measure Acceleration, Velocity and Displacement
- Accepts Process Inputs (Pressure/Temp/Flow etc.)
- Internal Webserver for Network Monitoring
- Line Stackable to Minimise Panel Wiring
- Din Rail Mount Compatible
- +24V Power Supply Input
- Four Programmable Alarms per channel plus Transducer Integrity
- Fully Programmable Scaling and Units
- Software Selectable Filters
- Compact Size only 123mm x 107mm x 51mm
- Future Proofed - Flash Upgradeable

Supplied with a powerful internal Webserver, the unit allows remote access through standard Ethernet protocol and connection via RJ45 cabling, compatible with 10/100 Base-T networks. Access to the unit is through standard Web browser tools, which allows complete configuration of the measurement channels, as well as the display of alarm status, signal levels and historical / trending information.

Its small size and din rail mounting format allow it to be positioned in existing panels with other equipment or locally to the monitored machine in a junction box. Unit will fit both 35mm and G type DIN rails.

The front panel BNC connectors can either be used as two wire channel inputs or as channel monitor points for local detailed analysis. Transducers configured for either two or three wire operation can be connected to the in-line terminal interface.



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GT 3966SpyderNet Remote Machine Monitor

SPECIFICATION

Channel Inputs a) Accelerometer, 2 wire only.
ICP type 100mV/g sensitivity.
Velocity, 2 wire only.
4mV/mm/s.

b) Current Loop 4-20mA, Passive (+18V) or Active.

Front Panel DIL switch sets channel to either a) or b) above.
Inputs via screw terminals or BNC. Raw Transducer and process inputs available as outputs on front panel B NC's if removable in-line screw terminals used.

User Interface permits customised channel labelling.

Monitoring Mode Selectable per channel through Web interface.

a) Acceleration (Peak or RMS)
b) Velocity (RMS)
c) Displacement (Peak to Peak)
d) User defined

Range Acceleration 0–500 m/s² Variable Range Setting
(100mV/g) 0-50 g Variable Range Setting
Velocity 0–50 mm/s Variable Range Setting
0-2 inch/s Variable Range Setting
Current Loop User Defined Variable Range Setting

Selectable per channel through Web interface.

Measurement Accuracy 12-bit ADC resolution.
1% typ.

Filters Low Pass Filter
Range 50Hz to 12kHz in 5 ranges
24dB/Octave

High Pass Filter
Range 2Hz to 350Hz in 5 ranges
24dB/Octave

Selectable per channel through Web interface.

Cascade Facility Side access flying lead allows data and power connectivity to the complete Spyder range of products (minimising panel wiring).
Realising a single power and Ethernet connection.

Network Interface TCP/IP Network Connection to IEEE 802.3 10Base-T.
Wireless Connection to IEEE 802.11b

Supply Voltage +24V +/- 2V, 350mA Typ, 500mA Max



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Measurement Cycle Channel measurement window 30sec typ, 240sec max, overall 8-channel measurement cycle.

Note: - Disabled channels will reduce (pro rata) measurement cycle.

User Interface Built-in Web Server requires no special software (Internet Explorer 5.5 or better). User definable IP address. Supplied with configurable username and password for secure access.

Alarm Status Six Status Indicators per channel including transducer integrity.

- a) Low-Low
- b) Low
- c) High
- d) High-High
- e) Normal
- f) Transducer Integrity

All alarm labels and levels independently configurable through user interface.

Indicators

Individual Channel lamp indicators (Green/Red) for local visual alarm status. Lamp is inactive for disabled channels.

Summary 'OK' lamp for 'System Health' Indication.

Data Logging Onboard RAM facility to store up to 90 days of 8 channel data values configured to channel function selected. Historic value display as well as trending graphics.

Temperature

Operation = 0°C to +50°C

Survival = -30°C to +85°C

Mechanical 123mm X 107mm X 51mm. Designed for mounting in existing panel or enclosure utilising 35mm and G type DIN rails. Rated to IP51.

Machine Monitor & Protector

Suitable for monitoring many types of rotating machinery, including turbines, motors, pumps and fans etc. The DN36 Series offers dual channel monitoring, providing 'mix and match' measurement options such as vibration, displacement, temperature, speed, eccentricity etc across both channels. Measurement function on all units is factory set by fitting personality cards, whilst operators can set measurement range, units, alarm trip points and filter selection by means of the front panel software interface. Two alarm levels per channel are available to drive common relays for the safe tripping of plant; a system integrity alarm is also routed to a separate relay. Units can also be fitted with the optional web server to give SpyderNet Functionality

