

Enwatch™ Online Surveillance System



The **Enwatch** Online Surveillance System is Entek's cost-effective solution for monitoring the condition of the important machines in your plant. It bridges the gap between portable data collectors with slow periodic update capabilities and continuous monitoring systems. The Enwatch Online Surveillance system integrates seamlessly with the EMONITOR Odyssey® or Enshare™ machinery information system to fully automate any condition monitoring program. EMONITOR Odyssey or Enshare is Entek's integrated solution that brings you a complete picture of the condition of your plant.

Powerful Data Acquisition.

The Enwatch unit provides powerful data acquisition capabilities and transfers information over existing Ethernet local area network (LAN) for sequential monitoring of machines distributed throughout the plant.

Remote Machinery Diagnosis.

Enwatch allows remote diagnosis of machinery in alarm using the Enline 66™ software. Information from any channel of a specified Enwatch unit can be transferred, processed and displayed on a PC workstation for live-mode monitoring of spectra, time waveforms, trends, spectral maps and polar plots of data. Internet access makes troubleshooting of equipment anywhere in the world possible.

Unique Alarm Notification.

The Enwatch Online Surveillance System provides an intuitive visual display of the plant status at a glance using the Plantlink™ presentation tool. The unique alarm notification enables plant personnel

to keep in touch with machinery status through automatic e-mail notification when alarm thresholds have been exceeded.

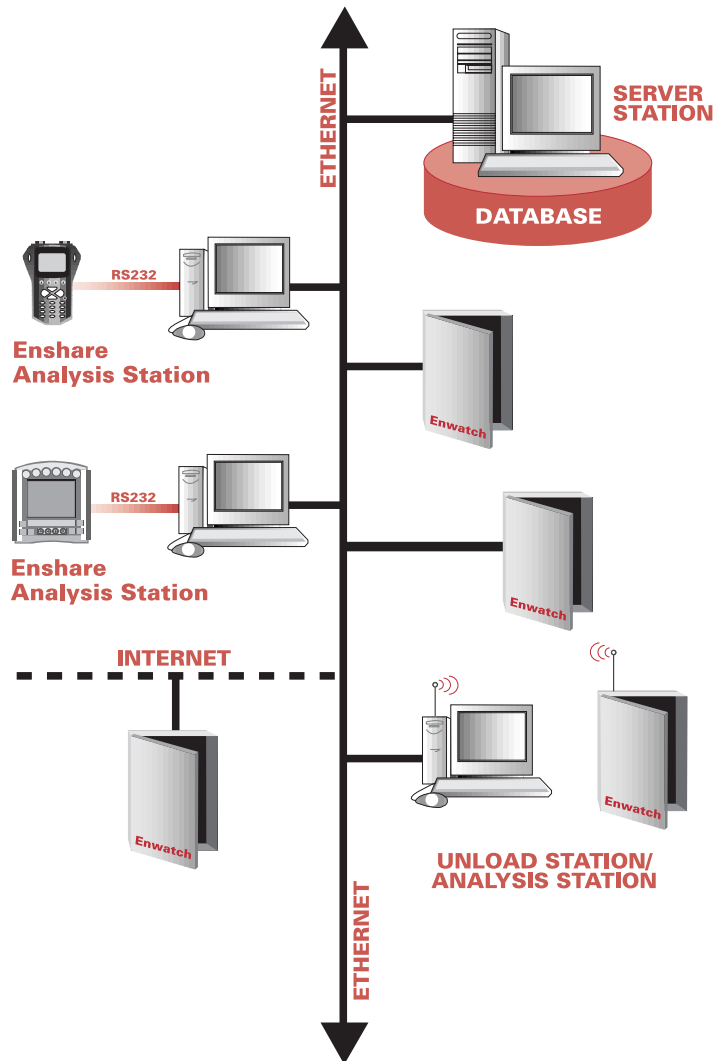
Cost-effective Monitoring.

Information can be acquired from important machinery in your plant more frequently than is cost-effective using

portable instrumentation. The Enwatch unit enables data to be acquired from inaccessible and dangerous locations.

Compact Size.

Its compact size allows it to be installed close to the machine under surveillance, which reduces cost due to shorter transducer cable runs.



**Rockwell
Automation**

Inputs

No. of channels: 16 vibration + 4 synchronizer
Voltage Protection: 2000V ESD protection

Vibration Inputs

Ranges: $\pm 10\text{mV}$ to $\pm 10\text{V}$, 7 ranges (programmable)
ICP Interface: 3.6mA @ 24 d.c., configurable per channel
Coupling: AC/DC (process measurements), configurable per channel
Anti-alias Filter: 130db/octave
High Pass Filters: none, 0.36Hz, 2.67Hz, 5.3Hz, 23.8Hz (4th order)
Sensitivity Range: 144dB
Channel Crosstalk: -75dB (typical)
Amplitude Accuracy: $\pm 2\%$ in passband (typical)
Phase Accuracy: $\pm 3^\circ$
Harmonic Distortions: -75dB (typical)
Hardware Integration: 1 level

High Frequency Measurement

gSE filters: 200 Hz & 5 KHz (2nd order)
Gain: 1 to 10 (factory settable)

Synchronizer (1/rev.) Inputs

Number of Inputs: 4
Signal Range: 0 to 1V d.c. low
5 to 24V d.c. high (isolated or non-isolated)
Machine Speed Range: 0.6 to 600,000 rpm
Time to Lock: 2 revolutions
Averaging: 1, 2, 4, . . . 32,768 programmable
Tacho Information: rpm using trigger input
Order Analysis: Phase-locked-loop for order analysis function

Certification



Processing

Frequency Domain:

ADC: 16 bit
Maximum Frequencies: 25 Hz to 20 KHz (1500 CPM to 1200 KCPM)
Dynamic Range: 96 dB (theoretical)
Lines of Resolution: up to 12,800 lines
Overall Units: Acceleration, velocity or displacement (integration in hardware & software) and gSE data

Outputs

Status: LEDs indicate system functions
Interface Port: RS232, 9600 baud

Storage

Memory Buffer: 640 Kbytes
Power Fail Handling: Automatic recovery on power interruption

Mechanical

Protection: NEMA 4, IP66
Enclosure: 16"x12"x6" (sheet steel)

Environmental

Temperature: -20° to 60° C (-4° to 140° F)

Power

Power Supply: 85 to 260V a.c. mains
Power Consumption: 0.5A max

Communications

Network: Ethernet-TCP/IP
Medium: 10BASE-T, RJ-45 connector
Speed: 10 Mbits/sec
Isolation: 1000 Vrms

Ordering Information

P/N

Enwatch Unit 49750

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