XR50

Cellular Sewage Lift Station Monitor
OmniSite lift station monitors are the industry's easiest to install, setup and use!

Designed for Wastewater Treatment
OmniSite monitors are the only patented product of their kind and were developed specifically for wastewater treatment systems. Every feature on the XR50 was designed with the customer in mind, including the terminal blocks, universal voltage inputs, on-board display and LED's.

Simple to Use
Installation is simple enough for customers to do themselves and setup takes just a few minutes: by visiting OmniSite's website to enter lift station settings and establish a "call out" list for alarm notification, your system is ready to go. A combination of cellular telephone and web-based technology makes it possible to monitor pump stations any day, any time, from any computer.

Peace of Mind
OmniSite's XR50 can predict problems at pump stations before they occur by analyzing conditions and making that data available to you instantaneously. The XR50 tracks pump run time, pump cycles, GPM, draw down times, inflow, rainfall and pulses from a flow meter. When an alarm occurs, you'll be notified within seconds – quickly enough to correct the situation and avoid costly, environmental problems.

Quick Overview

The Essentials:
(7)* Universal voltage inputs
(3) Inputs to monitor pump activity
(2) Pulse inputs (i.e. flow meters)
(1) Input to analyze rainfall
Transmits/Receives using GSM
Optional NEMA 4X enclosure

*Includes Rain and Pulse inputs as these can also be used as alarm inputs
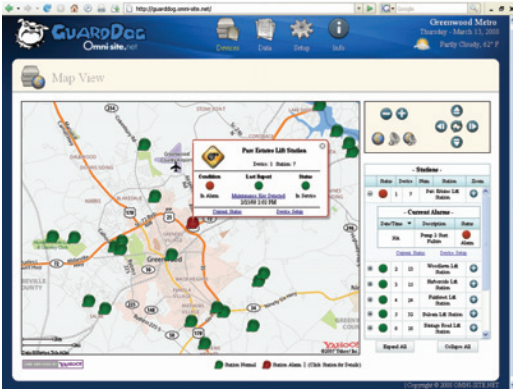
Website Features:
Quick setup and easy to use
Intuitive navigation
Interactive mapping by Yahoo!™
Detailed graphs and charts
Real time weather updates
Easy to organize and print reports

OmniSite lift station monitors are self-contained, require no additional software and need minimal maintenance, making them the most affordable monitors available!

OmniSite
CELLULAR MONITORING SOLUTIONS

The XR50 includes OmniSite's "plug and play" GuardDog software, which eliminates the need for custom programming.
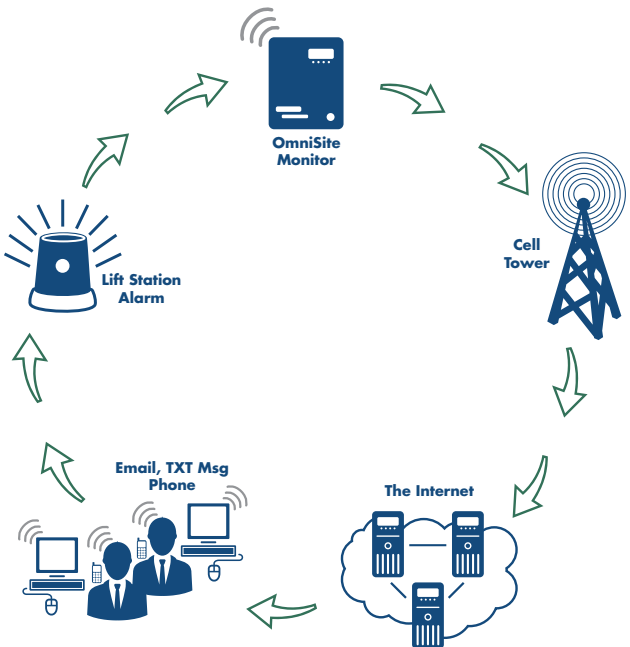

OmniSite's GuardDog web interface provides simple web navigation for monitoring pump stations.

Critical Data Available Online:

Pump run time
On/Off cycles
Drawdown time
Inflow rate
Rainfall
Total station flow
Alarm events and deliveries
Measured GPM

How OmniSite Works

OmniSite relies on a combination of cellular telephone and web-based technology. The XR50 is installed at pump stations and sends a wireless signal to the local cellular tower. That signal is bounced to OmniSite's web interface, where customers can log on – any day, any time, from any computer – and see how each pump station is operating. A "call out" list is set up online, so that when an alarm is triggered at a lift station, identified operators are contacted immediately. Because OmniSite engineers recognize today's fast-paced busy world, that notification comes by way of text message, email or call to your cellular or hard-wired phone.

OmniSite
CELLULAR MONITORING SOLUTIONS

Specifications

I/O: Accepts (10) Universal Inputs- any voltage in the range of + 12VDC or VAC to + 120VDC or VAC. Opto-isolated 4000 VAC isolation

(3) Pulse Inputs: 0-5hz from dry contact or open collector device (1 pulse input reserved for 0.01" pulsing rain gauge)

Input Power: 85-240 VAC +/- 10% @ 0.5A max or optional 12 VDC @ 2A max

Terminal Blocks: gray color, removable style, spring-clamp accepts #14-22 AWG solid or stranded wire

External Power Source: 15 VDC @ 100mA battery backed internal power source available for powering external un-powered alarm contacts

SD Memory Card Slot: on-board SD memory card slot for data logging and software updates

Battery Backup: Internal 12 VDC, rechargeable 800mA/hr sealed lead acid battery rated for 4 hours backup during AC power loss

Operating Temperature: -20 – 150 Degf

Operating Humidity: 0-90% RH, non-condensing

Radio: Quad Band GSM cellular transceiver 850/900/1800/1900, -106 dB sensitivity (typical), Class 4 (2W @ 850/900 MHZ) class 1 (1W@ 1800/1900 MHZ). Certification FCC Parts 15,22,24, GCF Ver 3.21.1, PTCRB Ver 3.7.1

Antenna: Internal 3 dBi omni-direction Phantom antenna suitable for most applications. Optional remote mount high gain antennas and cables available

Display: 2 line X 16 Char white background LCD w/ backlight. Includes (4) "easy-use" navigation buttons

Personal ID Key Reader: Smart key reader to identify maintenance personnel. (1) smart key included

Enclosure: Standard unit is hinged painted steel design suitable for direct panel mount. Optional NEMA 4X polycarbonate enclosure w/ stainless locking hasps and solid or clear cover available

Dimensions: panel mount – 8.5"W x 8.2"H x 3.5"D – with optional NEMA 4X enclosure – 12"H x 10"W x 4"D

Weight: Standard panel mount - 6.0 lbs, with NEMA 4X enclosure - 6.8 lbs

Certification: UL pending

Protection: US Patent #7,228,129

The XR50 is perfect for monitoring digital alarm inputs and analyzing trends at a lift station. For additional monitoring options – including analog process variables and actual pump control – see OmniSite's Crystal Ball.