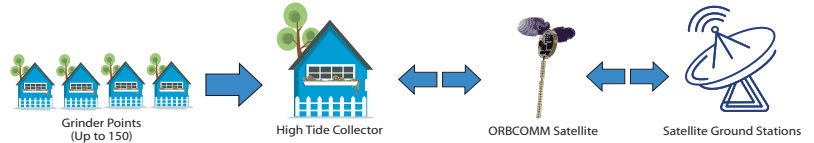
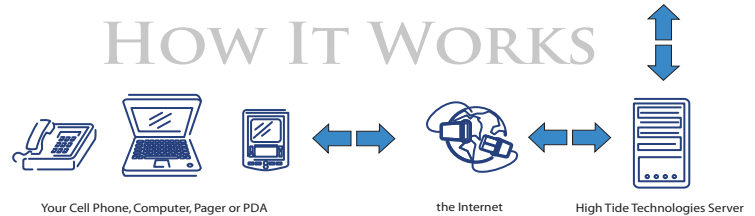


HTT Grinder Pump Guardian

Satellite Monitoring



HOW IT WORKS



The Grinder Pump Guardian is a cost-effective solution to wirelessly monitor the health status of individual grinder pumps. The GPG system consists of a compact wireless module for each grinder control panel, a neighborhood collector to transmit alarm data via satellite to a central server and a web-based application to view current status and historical information. When any pump is in alarm, the GPG system automatically notifies maintenance staff of the street address via voice or text message. Utility personnel can view the status of every pump in their system from any Internet-connected computer, thus eliminating drive-by expenses and time.

Collector Features:

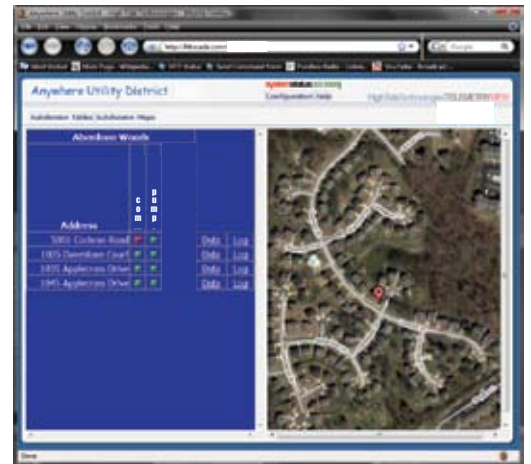
- Built in Satellite Modem
- No Towers, Repeaters, Licenses or Surveys required.
- No Antenna Aiming
- A/C Powered
- Battery Back-Up and Alarming
- Simple Installation/Service

Guardian Unit Features:

- Built-In 900mhz Radio
- A/C Powered
- Simple Installation/Service

System Features:

- Secure access from any Internet connected computer
- 24 hour customer support
- Communication failure alarms
- Pump fail alarms
- Alarms to text pager, cell phone or land line.



Input Power	110/220 VAC
Backup Power	12v DC lead acid 7 -14 Days minimum
Modem	Stellar ST-2500 (Collector) MaxStream 900mhz
Antenna	1/2 Wave WHIP
Enclosure	NEMA 4 FIBERGLASS (Collector) NEMA 4 ABS (Guardian)
Satellite Vendor	ORBCOMM, LLC
Storage Temp	-40 ~ 60 °C
Operating Temp	-20 ~ 60 °C
Humidity	0~100% non-condensing
Alarm Conditions	External power loss Low battery Communication failure Pump failure