Pressure Transceiver
Galaxy – Pressure Level Monitoring

The Galaxy two-way network offers water resource authorities the reliability and wide area coverage needed to confidently deploy various sensors in order to manage a city's water cycle. The highly secure Galaxy network is a comprehensive solution for all segments in water resource management, and can facilitate additional utility demand as and when needed, to provide coverage to tens of thousands of battery operated sensors from a single base station. Utilizing wireless communications, the Galaxy network does not have to contend with the limitations of the public Telco infrastructure. Sensors in the Galaxy water resource management range include: water quality sensors, water flow meters, water pressure sensors, and water level sensors.

The Pressure Transceiver utilizes two-way communications to measure the water pressure in pipes at any point throughout the water system. The **Pressure Transceiver** sends reports at two alert levels with adjustable parameters; the pressure level parameters can be adjusted as and when needed from the Base Station. Two-way communications function as follows: The Pressure Transceiver systematically stores pressure levels in the transceiver's data-logger. The Galaxy Base Station periodically interrogates the Pressure Transceiver - at flexible intervals, scheduled according to customers' needs. The Pressure Transceiver transmits pressure status reports back to the Base Station. Two alert levels allow for vigilant status reports: If the pressure level crosses either alert level (using preprogrammed adjustable parameters) an alert is automatically generated and included in the next status report.

Single Base Station for wide area coverage with **tens of thousands** of managed sensors.

Pressure Monitoring

- Optimization through reference points
- Real time monitoring and alerts

Telematics *Wireless*

Properties

- Two-way network for sensor monitoring and remote control
- Highly secure management system, can be integrated to security systems
- External power supply not needed, unit powered by Internal battery

RF Specifications

Frequency:	450-470MHz- Licensed band
Bandwidth:	6.25KHz
Receiver Sensitivity:	-120dBm@4.8kbps
Output Transmit Power:	Up to +36dBm/4Watt
Certification:	FCC Part 90.210, spectrum mask E
Range from Base Station to Transceiver:	Up to 5km (depending on topography)
Range from Repeater to Transceiver:	Up to 3km (depending on topography)
Range from Base Station to Repeater:	Up to 20km (depending on topography)

Electrical Specifications

Battery life:	5 years

Mechanical Specifications

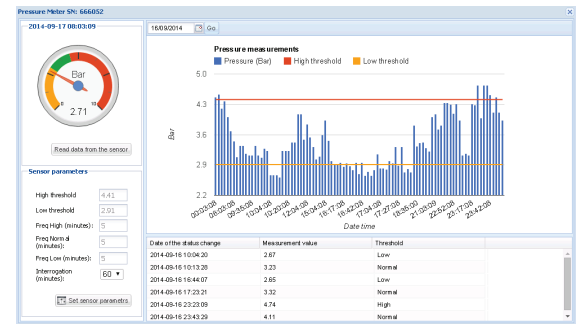|	
Physical Dimensions:	130x130x30 mm

Sensor Specifications

Sensor Material:	Ceramic
Pressure:	Up to 10 bar
Accuracy:	To 1% FSO, according to IEC 60770
Mechanical Connection:	G ¼" DIN 3852
Output Signal/ Supply:	Standard: 2-wire: 4-20mA
Vibration:	10g, 25Hz–2kHz; according to DIN EN 60068-2-6
Shock:	500g/ 1msec; according to DIN EN 60068-2-27
Long Term Stability:	±0.3% FSO/ year, at reference conditions
Operational Life:	>100 x 106 cycles
CE- conformity:	EMC Directive: 2004/108/EC
	Pressure Equipment Directive: 97/23/EC (module A)2

Vigilant status reports include two alert levels

Sensors on the map

Repeater with optional Solar Panel for fully autonomous operation

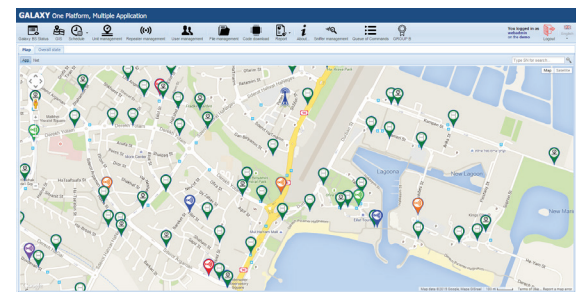When needed repeaters are used to cover "dead zones" or to increase the coverage range

Company Overview

Telematics Wireless is a recognized global leader in the delivery of robust, reliable and advanced energy and water resource management systems based on RF wireless networks. With almost 20 years of experience in Machine-to-Machine (M2M) technologies, our solutions support a wide spectrum of smart city applications, increasing their efficiency, reliability, and cost-effectiveness. Telematics Wireless has delivered and installed over 15 million cutting-edge wireless devices and water systems for Automatic Meter Readings (AMR), Advanced Metering Infrastructure (AMI), energy resource management, smart grid, street and outdoor lighting control systems, location-based services, asset tracking and monitoring, and electronic toll collection.

* Specifications subject to change without prior notice

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