



DataCheck Wireless Sensor Power & Control

Description

DataCheck™ is a wireless telemetry system used to power and control a variety of low-voltage intrinsically-safe (IS) sensors and transmit their data from hazardous areas. **DataCheck™** employs state-of-the-art super high energy density lithium ion batteries and a patented sensor powering and control interface to provide long-term intermittent power and telemetry for a variety of low-power sensors.

DataCheck™ systems consist of IS, battery operated sensors, transmitters, repeaters (if needed), and receivers. The proprietary 900 MHz frequency-hopping Spread Spectrum technology provides numerous advantages, including:

Reliability: **DataCheck™** transmitters are "fully supervised" to ensure that they are actually communicating with their assigned receivers. The battery condition of each transmitter is monitored, and "Low Battery" alarms are issued about 1 month before batteries must be replaced. Data is transmitted very redundantly over multiple channels to ensure ultra-reliable communication even in the presence of noise and RF interference.

Features

- Battery powered for up to 5 years
- Intrinsically Safe (Exia)

Licensing: products are FCC approved for unlicensed operation in the 900 MHz ISM band.

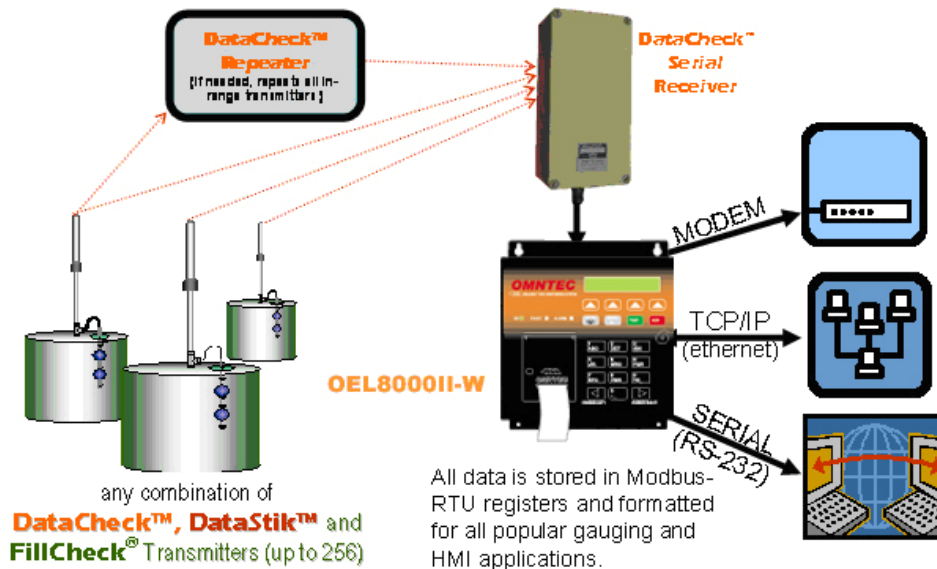
Superior Range: Multiple Repeaters may be employed to extend range around obstructions or over much greater distances.

Transmitter Specifications	
Spread Spectrum Scheme	Frequency Hopping
Operating Frequency Range	Multiple channels within the 902-928 MHz ISM band
Operating Temperature	-40° F to 150° F
Enclosure Rating	IP-67
Maximum Sensor Power	6 VDC @ 13 mA
Sensor Telemetry Duty Cycle	Programmable 10 seconds to daily or event-driven using the master discrete input
Battery type	2 proprietary Lithium Thionyl Chloride D cells (16.5 Ah, 10 year shelf-life)
Agency Approvals	CSA approved (US/C) Class 1 Div. Groups C&D, Exia
Overlapping Systems	Each DataCheck™ system is assigned in a unique ID code so that multiple systems can coexist within a small area.

Specifications subject to change without notice, verify with manufacturer.

DataCheck™ System Architecture

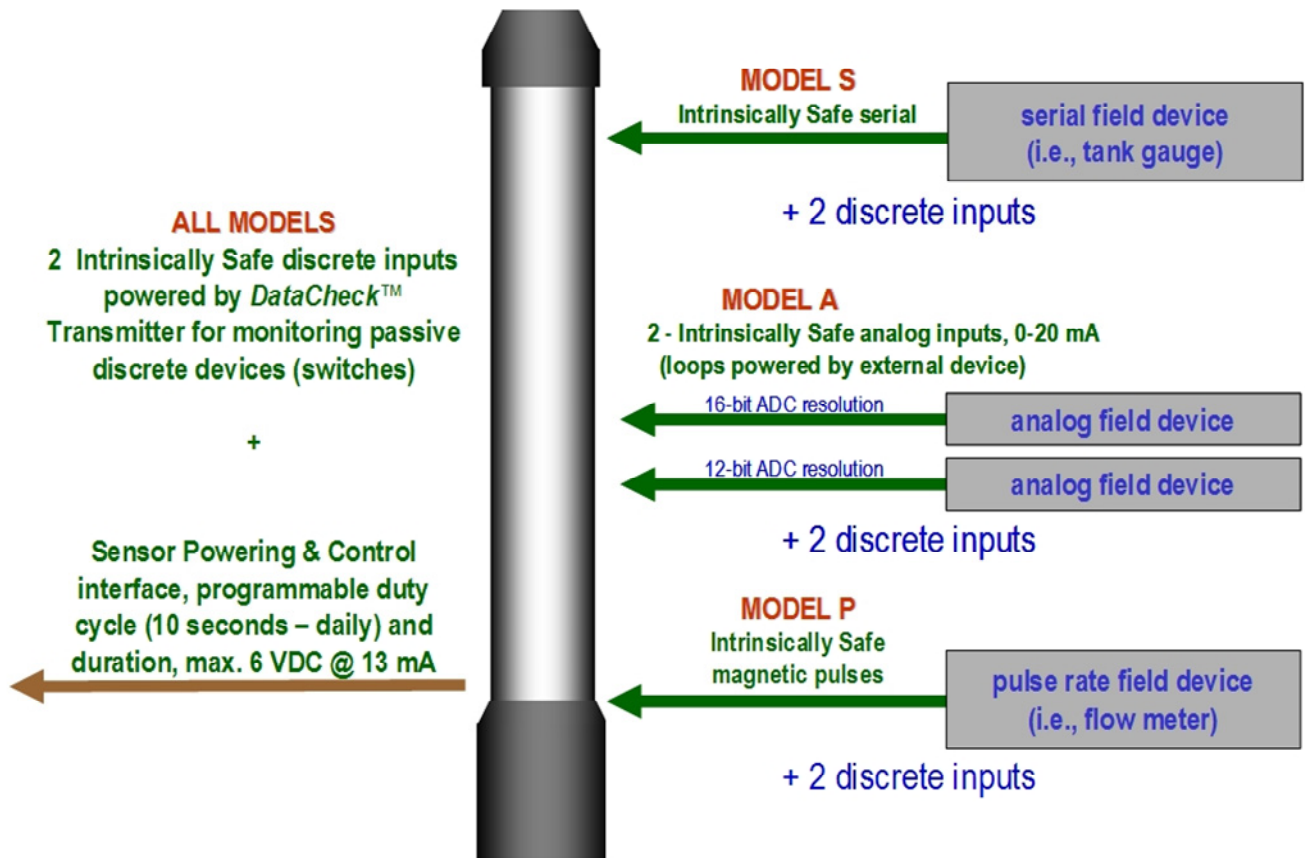
PROVIDING GLOBAL SCADA ACCESS
TO ALL **INNOVATIVE** WIRELESS PRODUCTS



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Interface: The **DataCheck™ System Architecture** (DSP) provides a universal interface to all **OMNTEC** wireless products, including **FillCheck®**, **DataCheck™**, and **DataStik™**. Each DSP can supervise up to 256 of any combination of Transmitters and Repeaters. All sensor and transmitter data plus all system alarms and diagnostic features are conveniently stored in Modbus-RTU registers which can be accessed by serial port, Ethernet (TCP/IP), or a modem. Sensor data is provided in several formats so as to be readily accessed by all popular HMI, Terminal Management Systems and tank gauging applications.



OMNTEC® 

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