Predictive Corrosion Management

Probes	
Sensor Type	Sol-Gel spray, single element
Measurement Type	Pulse-Echo 0° Transducer
Couplant	Dry-coupled
Probe Dimensions	24 x 24 x 16 mm/0.94 x 0.94 x 0.63"
Element Sizes	8 x 8 mm
Frequency	5 MHz
Probe Spot Size (-6 dB @ 30 mm wt)	4 mm/0.16"

Motes		
ATEX/IECEx Certification	II 1G Ex ia IIC T4 Ga, ATEX Zone 0	
FM Certification (pending)	IS CL 1 DIV 1 GP A, B, C, D T4	
Power	Battery	
Ingress Protection	IP67	
Max number Probes per Belt	4 †	
Max number Probes per Mote	64	
Max number Thermalcouples per Mote	8	
Dimensions Mote	243 x 106 x 82 mm/9.57 x 4.17 x 3.23" ††	
Communication (wireless)	6LoWPAN	
Communication Frequency	2.4 GHz	
Maximum Distance Mote-Antenna	15 m/16.5 yd	
Maximum Distance Mote-Probe	10 m/10.9 yd	
Maximum Distance Mote-Mote	**Free Space**	1,200 m/1.312 yd †††
Certification	CE and FCC certification pending	

Gateway	
IS Certification	None
Power	Power Over Ethernet
Max nr Motes per Gateway	100
Dimensions Gateway	243 x 106 x 82 mm/9.57 x 4.17 x 3.23" ††
Ingress Protection	IP67
Communication (wireless to mote)	6LoWPAN
Communication Frequency	2.4 GHz
Communication (wired to server)	Ethernet (TCP/IP)
Certification	CE, FCC

Operation	
Min Object Temp	-50°C/-58°F
Max Object Temp	200°C/392°F
Min Ambient Temp	-40°C/-40°F
Max Ambient Temp	60°C/140°F
Supported Pipe Diameters	3" – 22" (belts)
	>22" (magnetic clamps)
Supported Nominal Wall Thickness	3–30 mm/0.12–1.18"

Performance	
Depth Resolution	0.03 mm with zero crossing/0.02 mm with cross correlation
Depth Repeatability	0.02 mm with temperature compensation
Battery Lifetime	> 5 years ††††

† Default application is in clock positions. Other configurations are possible.

†† Excluding antenna.

††† Actual Radio Frequency range performance is subject to a number of installation-specific variables including, but not restricted to, ambient temperature, relative humidity, presence of active interference sources, line-of-sight obstacles, and near-presence of objects (for example trees, walls, signage, piping, and so on) that may induce multipath fading. As a result, actual performance varies.

†††† Based on daily measurements with 64 probes under normal conditions.

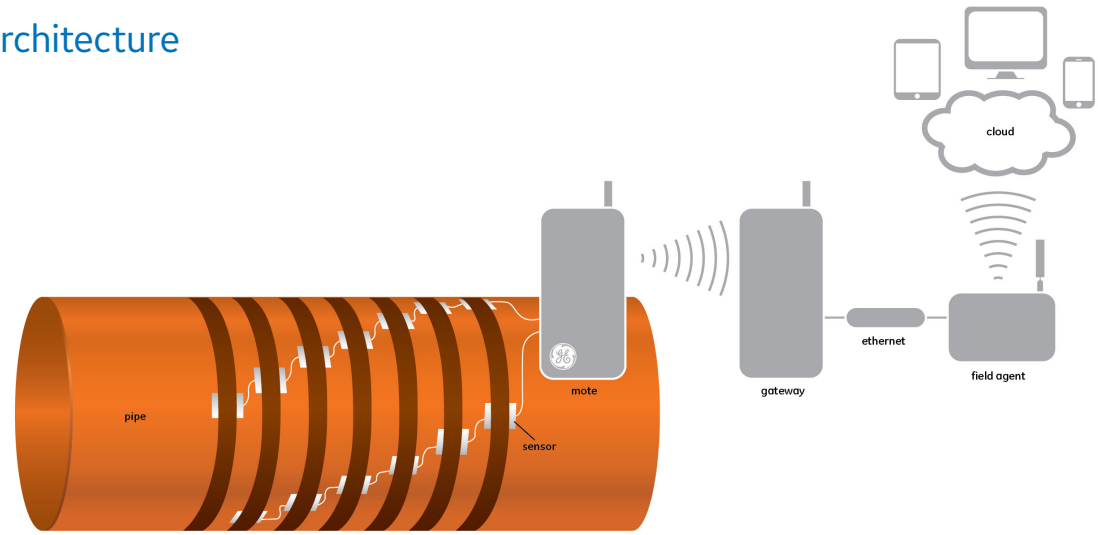
Mini Field Agent*			
Selection Criteria/ Requirements	• Limited cabinet space available • Low power operation • Low cost • Modbus TCP or OPC-UA only needed • Lower performance Rard • CANBus support, WiFi or BLE, and IPM required	**Memory**	512MBDDR3/1GB Flash
Form Factor	Small	**Software**	Linux
Protocols	Modbus TCP, OPC-UA	**Interfaces**	(4) Ethernet 10/10, IsoRS232, RS485, CAN, USB, SD, WiFi, BLE, mPCIe, Relay Out/Opto In
Performance to run Predix applications	Limited	**Cellular**	3G/4G/LTE/GSM/CDMA
Capacity	Low (1000+ tags)	**Power**	9VDC-30VDC
Connectivity Interfaces	Extensive (wireless and wired)	**Power Consumption**	250mA@24VDC
Embedded with GE Controls	No	**Dimensions**	5.5D"x5.25H"x1.5"W
Processor	600MHz Arm A8		

Browser Capabilities

Web Browsers: Google Chrome, Internet Exploerer (11.0.27 and above)

Operating Systems: Microsoft Windows 7

Cloud Architecture



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