

Vireless

Solutions Kits: Tank Level

- Easily monitor remote and mobile tanks and totes
 - Reduce downtime by planning tank refills or replacements
 - Prevent hazardous environmental overfills
 - Set alarms to avoid pump cavitation
- Fully integrated solution for easy setup
 - Setup wireless network using HMI interface
 - No programming needed
- Visualize data locally on the HMI, send it to the network, or view it remotely via the cloud





Wireless Solutions Kits: Tank Level



As simple as...

- 1. Plug in box
- 2. Bind up to 16 nodes through HMI screen; Install sensors & nodes*
- 3. Begin collecting data





Data Collection

- Monitor tank levels every 5 minutes with ability to fast sample for 15 minutes on demand
- Set tank level, offset, and warnings & alarms through HMI
- Easily view current level of up to 16 tanks simultaneously
- Enable flashing LED's on nodes to easily find when in warning or alarm states
- Graph tank levels with up to 7 days of data

HMI shows dashboard for each asset



Touch an asset icon to view tank level, status and thresholds





Wireless Solutions Kits: Tank Level



All-in-One: Sensor and Node

73.7 mm

40.0 mm

Models	Range	Description
DX80N9Q45UAC	900 MHz	Q45 Node with Integrated Ultrasonic Sensor
DX80N2Q45UAC	2.4 GHz	Q45 Node with Integrated Ultrasonic Sensor



ø 43.5 mm

1 1/4" NPT

Ultrasonic Sensor

Models	Range	Description
K50UX1ARA	100 mm to 1 m	Ultrasonic sensor with 1-wire serial interface
K50UX1CRA	300 mm to 3 m	Ultrasonic sensor with 1-wire serial interface



Nodes with 1-Wire Serial Interface

	Models	Description	Frequency		
	DX80N9Q45U	Q45 Wireless Node with 1-Wire Serial	900 MHz		
	DX80N2Q45U	Interface	2.4 GHz		
	DX80N9X1S-P6	1-wire Serial Performance Node	900 MHz		
	DX80N2X1S-P6	with integrated battery	2.4 GHz		
	DX80N9X6S-P6	1-wire Serial Performance Node	900 MHz		
	DX80N2X6S-P6	10 to 30 V dc	2.4 GHz		
	DX80N9X1W-P6L	1-wire Serial	900 MHz		
	DX80N2X1W-P6L	with integrated battery	2.4 GHz		



Brackets



Ultrasonic sensor and a Wireless Q45 Node



BWA-BK-004 Mounts both the K50U Ultrasonic sensor and a DX80 Nodes

Cordsets	
Туре	Model
	DEE2R-51D 0.31 m (1 ft)
5-Pin M12/Euro-Style— Double-Ended	DEE2R-53D 0.91 m (3 ft)
	DEE2R-58D 2.44 m (8 ft)



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Wireless Solutions Kits: Vibration

- Easily monitor machine vibration on any rotating asset
 - Reduce downtime and plan needed maintenance
 - Efficiently manage replacement parts
 - Track machine faults and warranty
- Fully integrated solution for easy setup
 - Setup wireless network using HMI interface
 - No programming needed
- Visualize data locally on the HMI, send it to the network, or view it remotely via the cloud





Wireless Solutions Kits: Vibration

Pre-programmed DXM wireless controller (programmed with Vibration Monitoring & Predictive Maintenance Solution Guide Files), including the machine learning algorithm

14" x 12"

Polycarbonate Enclosure

5-Port Industrial Ethernet switch for local network connection and

cloud access



Exhaust Fan Node As simple as... 1. Plug in box 2. Bind up to 16 nodes through HMI screen; Install sensors & nodes* 3. Begin collecting data Node Motor * Sold separately



Data Collection

- Samples every 5 minutes of RMS velocity and high frequency acceleration for X and Z axes
- Determines whether the asset is running, and only uses data when it is running
- Creates baseline over first 300 running samples
- Warning and alarm thresholds are automatically created for each vibration characteristic during baseline period
- Thresholds are set for both acute faults (quickly occurring) and chronic faults (long term deterioration)

HMI shows dashboard with a "Check Engine Light" for each asset



Touch an asset icon to view raw data, baselines and thresholds





Wireless Solutions Kits: Vibration



Vibration and Temperature Sensor

Models	Descript	ion		-		Models	D
QM42VT1	Vibration	and temperature sensor with 1-wire ser	ial interface		and interest	DX80N9Q45U	
					. 0	DX80N2Q45U	
					Ψ.	DX80N9Q45VT	
Supply Voltage	.	3.6 to 5.5 V dc or 10 to 24 V dc			. –	DX80N2Q45VT	
Current		Active comms: $OM(2)/(T_1, T_1, 0, m_1, ct, 5, 5)/(dc)$				DX80N9X1S-P6	
		QIVI42 VTT. TT.9 TIA at 5.5 V dC			6	DX80N2X1S-P6	
Indicators		Green flashing: Power ON Amber flicker: Serial Tx				DX80N9X6S-P6	
Vibration		Mounted base resonance:				DX80N2X6S-P6	
		5.5 kHz nominal Measuring range:		i		DX80N9X1W-P6L	
		0-46 mm/sec or 0–1.8 in/sec RMS			1	DX80N2X1W-P6L	
		Accuracy: $\pm 10\%$ @25 °C			Π		
Temperature		Measuring range:					
		-40 to ± 105 °C (-40 to ± 221 °F) Resolution: 0.1 °C Accuracy: ± 3 °C	42 mm				
Environmental	Rating	NEMA 6P, IEC IP67					
Shook		4000	5000	1			
SHOCK		4000	01012171				
Cable Connection		Integral 5-pin M12/Euro-style male quick disconnect (QD)		42 mm			
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				↓ I			
				12.7 mm			

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Frequency 900 MHz 2.4 GHz

900 MHz 2.4 GHz 900 MHz 2.4 GHz

900 MHz

2.4 GHz

Nodes with 1-Wire Serial Interface



Accessories

Brackets



BWA-BK-005



BWA-BK-008



BWA-BK-001 (magnet)

