



FULLY INTEGRATED,  
CELLULAR ENABLED  
TANK LEVEL SENSOR



# DIGI CONNECT<sup>®</sup> TANK

Monitor tank level and location remotely to optimize operations

Digi Connect Tank is a fully integrated cellular-enabled tank level sensor providing remote access to deployed tanks, totes and containers. Part of the Digi Tank solutions offer, it leverages Digi Remote Manager<sup>®</sup> and integration services, enabling customers who own or manage large numbers of tanks to easily integrate into existing applications or work with 3rd party applications.

Digi Connect Tank provides logistical and operational optimization via tank level and location data. Customers can route feet and personnel efficiently, reduce transportation and fuel costs, and increase supply chain predictability.

Using 3G/2G cellular technologies, Digi Connect Tank can be installed in locations where network infrastructure may not be available. Its small form factor, durable NEMA 4X enclosure, industry safety ratings and long-life battery make this product ideal for use in a broad range of tank applications.

## BENEFITS

- Remote access to tanks located virtually anywhere
- Fully integrated sensor/long life-battery/ global cellular in NEMA 4X enclosure for broad tank application support
- Tank location and level provides logistical and operational optimization
  - Reduced transportation/fuel costs via efficient routing of fleet and personnel
  - Predictable and efficient supply chain management
- Integrated ultrasonic sensor for non-contact liquid level measurements
  - Includes temp/sound speed compensation

## TARGET APPLICATIONS



Cooking Oil  
Recycling



Chemicals



Water/Waste  
Water

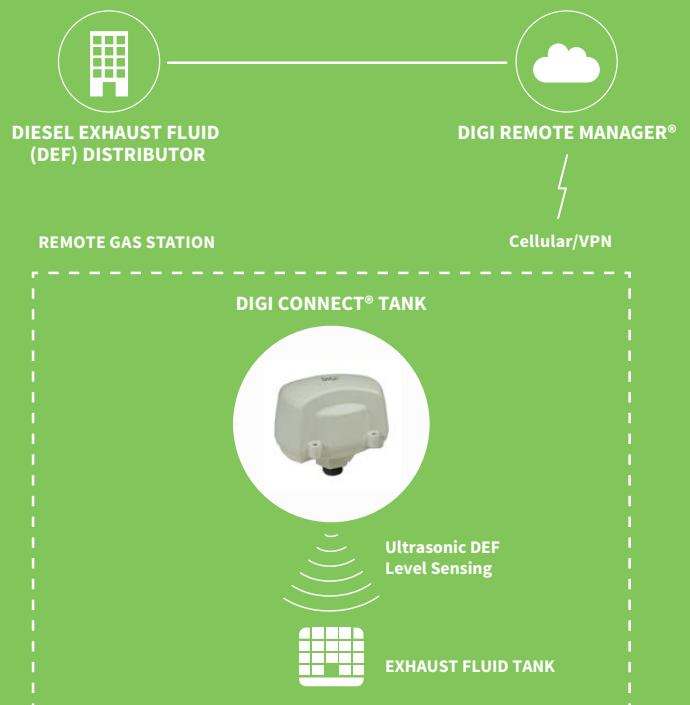


Waste Oil



Diesel  
Exhaust Fluid

## APPLICATION EXAMPLE



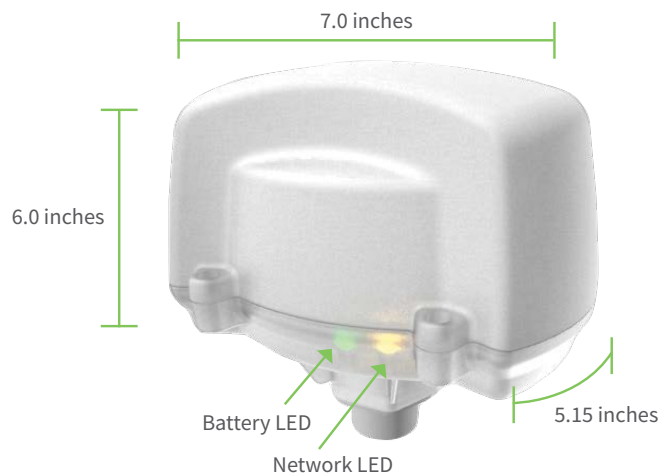
SPECIFICATIONS		Digi Connect® Tank	
WWAN			
CARRIERS	AT&T, International GSM Carriers*		
FREQUENCY BAND	North American Version: Dual Band UMTS/HSPA+ (850,1900 MHZ) International Version: Dual Band UMTS/HSPA+ (900/2100 MHZ) Dual-Band GSM (900/1800 MHZ) Global Version: Five Band UMTS/HSPA +(850/800,900,1900,2100 MHZ), Quad-GSM (850/900/1800/1900 MHZ)		
DATA RATE	HSDPA Cat. 10 / HSUPA Cat.6 data rates DL: max. 14.4 Mbps, UL: max. 5.76 Mbps >> EDGE class 12 data rates: DL: max. 237 kbps, UL: max. 237 kbps >> GPRS class 12 data rates DL: max. 85.6 kbps, UL: max. 85.6 kbps		
ANTENNA	Built-in		
SIM SLOTS	1		
SENSOR	SHORT RANGE	MID RANGE	
MODEL	Massa M-300/150	Massa M-300/95	
TYPE	Ultrasonic, built-in temperature/sound speed compensation		
RANGE**	Range at -20° C to +65° C: Up to 4 inches (100 mm) to 7 feet (2.1 meters)  Range at -30° C to -20° C: Up to 4 inches (100 mm) to 5 feet (1.5 meters)	Range at -20° C to +65° C: Up to 1 feet (0.3meters) to 13 feet (4 meters)  Range at -30° C to -20° C: Up to 1 feet (0.3meters) to 12 feet (3.7 meters)	
GPS/GLONASS			
CHANNELS	56		
TRACKING SENSITIVITY	GPS: -161 dBm; Glonass: -158 dBm		
TTFF (TYPICAL)	Cold Start: 30 seconds, Warm Start: 28 seconds; Glonass: Cold Start: 32s, Warm Start 25s		
HORIZONTAL ACCURACY	GPS: 2.5m; Glonass: 4m		
ANTENNA	Built-in		
MANAGEMENT			
CONFIGURATION & MANAGEMENT	Digi Remote Manager/Local USB to Serial CLI		
PROTOCOL	TCP		
POWER			
BATTERY	7.2V, 14.5 Ah, Lithium Thionyl Chloride, non-rechargeable, replaceable		
BATTERY LIFE	Approximately 2 years (@ 2 reads/transmits per day)		
ENVIRONMENTAL			
OPERATING TEMPERATURE	-30° C to +65° C (See range limitations in Sensor section above) -30° C to +60° C (for ATEX rated applications)		
STORAGE TEMPERATURE	-40° C to +85° C		
RELATIVE HUMIDITY	90% (Non-condensing after 90%)		
BATTERY DISCHARGE	<1%/year if stored at +30° C		
PHYSICAL			
DIMENSIONS (L X W X H)	7.0 in x 5.15 in x 6.0 in (17.8 cm x 12.9 cm x 15 cm)		
WEIGHT	1.25 lbs		
LEDS	Battery, Network		
ENCLOSURE MATERIAL	Valox (Note: Massa sensor is PVC/PPA)		
ENCLOSURE RATING	NEMA 4X		
MOUNTING	1” NPT		

\* For Verizon and Sprint availability please contact Digi

\*\* Range figure estimates are based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area and terrain between receiver and transmitter including indoor and outdoor structures such as walls, trees, buildings, hills, mountains, etc.

SPECIFICATIONS		Digi Connect® Tank
REGULATORY APPROVALS		
EMISSIONS	FCC part 15 Subpart B class B, EN55022: 2010/AC: 2011 class B, IECs-003 Issue 5: 2012 class B	
IMMUNITY	EN55024: 2010	
SAFETY	UL60950-1, CAN/CSA C22.2 No. 60950-1-01, IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013, EN 60950-1:2006 / A11:2009 / A1:2010 / A12:2011 / A2:2013 and EN 60950-22:2006;	
	C1D2, ANSI/ISA 12.12.01-2013, CSA C22.2 No. 213-M1987	
	ATEX EN 60079-0:2012+A11:2013, EN 60079-15:2010, eII 3 G Ex nA nC IIC T6 Gc	
WARRANTY		
PRODUCT WARRANTY	3 years, excluding battery	

PART NUMBERS	DESCRIPTION
CTANK-A511	Digi Connect Tank, Short Range Ultrasonic sensor, North America HSPA, with GPS
CTANK-A521	Digi Connect Tank, Mid Range Ultrasonic sensor, North America HSPA, with GPS
CTANK-A611	Digi Connect Tank, Short Range Ultrasonic sensor, International HSPA, with GPS
CTANK-A621	Digi Connect Tank, Mid Range Ultrasonic sensor, International HSPA, with GPS
CTANK-A711	Digi Connect Tank, Short Range Ultrasonic sensor, Global HSPA, with GPS
CTANK-A721	Digi Connect Tank, Mid Range Ultrasonic sensor, Global HSPA, with GPS



**DIGI SERVICE AND SUPPORT** / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit [www.digi.com/support](http://www.digi.com/support).

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