



CITY of NOVI CITY COUNCIL

Agenda Item J
August 13, 2018

SUBJECT: Approval to purchase one (1) Sewer Line Rapid Assessment Tool from Dukes Root Control, Inc., in the amount of \$25,310.00.

SUBMITTING DEPARTMENT: Department of Public Works, Water and Sewer Division

CITY MANAGER APPROVAL: 

EXPENDITURE REQUIRED	\$ 25,310.00
AMOUNT BUDGETED	\$ 25,310
APPROPRIATION REQUIRED	N/A
LINE ITEM NUMBER	592-592.00-982.040

BACKGROUND INFORMATION:

The Sewer Line Rapid Assessment Tool (SL-RAT) is a portable assessment tool used to detect blockage conditions in gravity sewer mains. Within a few minutes after arriving at the site, this tool can indicate whether there is a sewer line blockage in the main along with significance and/or severity of said blockage. This technology would allow Water and Sewer Division staff to quickly investigate and diagnose time sensitive problems like sanitary sewer back-ups.

Dukes Root Control, Inc., is the sole manufacturer's representative for the SL-RAT in Michigan (see the attached letter from InfoSense, Inc., the manufacturer of the equipment). This piece of equipment was budgeted in the Capital Improvement Program for this fiscal year (WTS029).

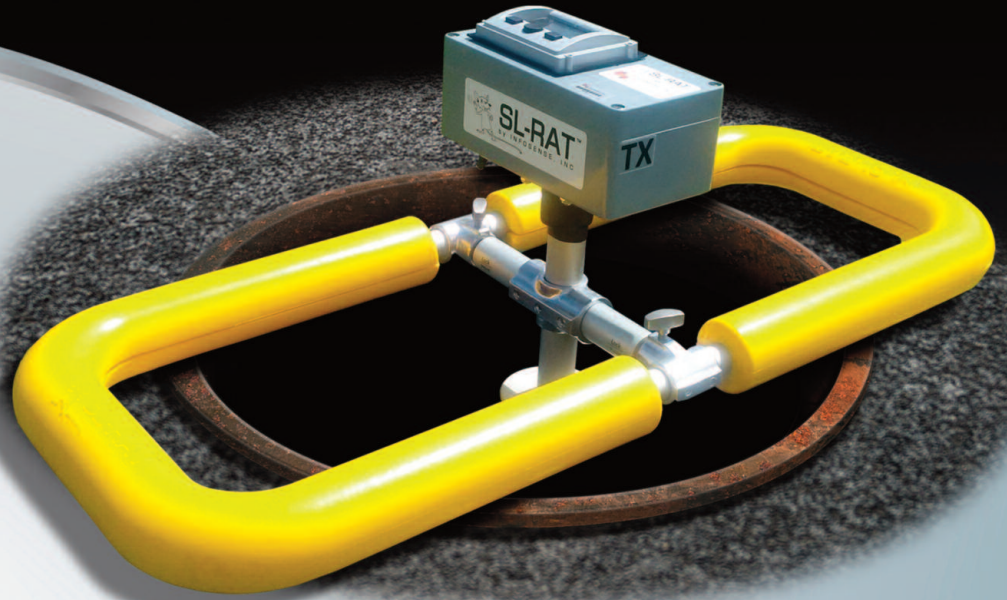
RECOMMENDED ACTION: Approval to purchase one (1) Sewer Line Rapid Assessment Tool from Dukes Root Control, Inc., in the amount of \$25,310.00.

OUR TECHNOLOGY IS BASED ON SOUND SCIENCE

Inspect More, Clean Better

MILLIONS OF FEET INSPECTED

- Quickly find blockages in your network
- Inspect over 10,000 ft/day
- Low Cost: 1/10th – 1/20th the cost of CCTV
- Safe – No flow contact, no confined space entry
- Highly portable and easy to operate

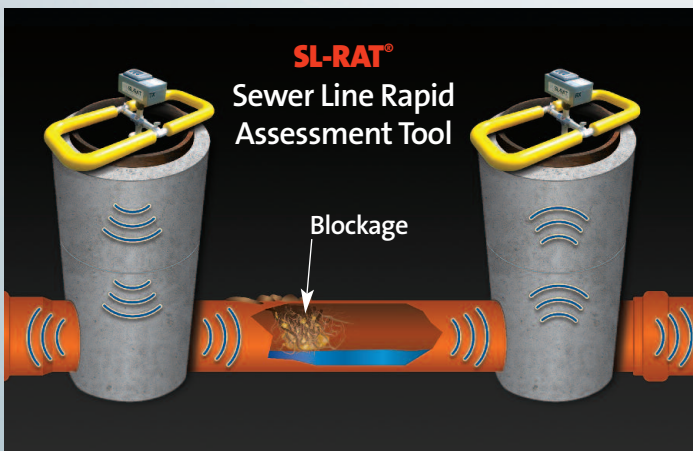


Acoustic Sewer Inspection

SL-RAT® - The Sewer Line Rapid Assessment Tool

The Sewer Line Rapid Assessment Tool, or SL-RAT®, is a highly portable onsite assessment tool for quickly detecting blockage conditions in gravity-fed sewers. The SL-RAT's ability to provide a blockage assessment in 3 minutes or less with no flow contact leads to an operating cost 1/10th to 1/20th that of CCTV. And, more importantly, the SL-RAT now enables wastewater utility operators to economically use a Condition-Based Maintenance strategy to improve SSO performance while using less resources.

The SL-RAT is composed of two components – the Transmitter (TX) and the Receiver (RX). Each SL-RAT device is sold or leased as a pair – with the TX providing the active acoustic transmission through the pipe. Think of the TX as “yelling” down the pipe, and the RX providing the microphone and signal processing capabilities to listen and interpret the received acoustic signal. Think of the RX as the brain “listening” for the blockage and processing the blockage assessment result.



For A DEMO Please Contact:

InfoSense, Inc. • 2102 Cambridge Beltway Drive • Suite D-1 • Charlotte, NC 28273, USA

Sales: 877-PIPECHK ext. 1 • Fax: 704-930-0145 • Email: sales@infosense.com • www.infosense.com

US Patent #8220484 • Portions of this product produced under license from the University of North Carolina at Charlotte • Version: 5-1-16

SL-RAT® Specification Sheet

Transmitter (TX)



Receiver (RX)



FEATURE	DESCRIPTION	OPERATING CHARACTERISTICS
Dimensions (Travel Mode)	RX 5.5" X 14" X 33" / TX 5.5" X 14" X 33"	Easily folds for compact storage and transport.
Dimensions (Deployed)	RX 24" X 14" X 33" / TX 27" X 14" X 33"	Rugged swing arm with simple design for pivoting.
Weight RX/TX	RX 11 lbs / TX 18 lbs	Light weight design for easy field deployment.
Travel Bag	CODE ALPHA - Nylon ripstop rugged custom wheeled duffel in combination with PUR foam/Closed Cell PE travel trays.	Provide cushion and device protection in a light weight and easily transportable package.
RX Battery	Custom Heavy Duty Lithium Ion, 1000 charge cycles, 11.1V, 3.6Ah, fully enclosed.	> 1 week battery life; fully charges in ~ 2 hours.
TX Battery	Custom Heavy Duty Lithium Ion, 1000 charge cycles, 11.1V, 3.6Ah, fully enclosed.	> 2 day battery life; fully charges in ~ 2 hours.
Extended Range Visual Display	122 X 32 pixel graphic display with extended environmental protection.	Able to operate from -20 C to +70 C / -4°F to 158°F.
Speaker	Efficient marine grade heavy duty speaker with high fidelity across a broad sound spectrum.	Rugged. Field proven. Reliable.
Microphone	Harsh environment microphone resists effects of water immersion, mud, sand and salt encrustation.	Rugged, Field proven design. Reliable with excellent acoustic performance.
Construction	Constructed using 6061-Aluminum, 301 Stainless, and a composite resin control box.	Provides strength and durability in a light weight package.
Device Memory	RX unit stores up to 200 measurements for download to PC via USB.	Stores > 3 days measurements.
Electronics	Custom designed for efficient power management and maximum signal processing performance. Manufactured in an ISO:9000 certified state-of-the-art facility.	Accurate blockage assessments in real time with long battery life.
Water & Environmental Resistance	Electronics are fully isolated within gasketed enclosures. The speaker is protected within a 6061-Aluminum housing.	Reduced downtime and repair.
Cleanability	Durable surfaces can be cleaned with industrial wipes, alcohol, or other standard cleaning agents.	Economically maintain crew hygiene and health safety.
Communication/Data Synching	RX and TX communication and synchronization via standard IEEE RF transceiver modules operating within the 2.4GHz ISM band.	Provides infield operation verification and automation.
GPS Enabled	Uses the latest generation energy-efficient and accurate 10Hz "map-grade" GPS chipset found in many high quality mobile consumer devices. GNSS, GLONASS, and GALILEO compatible.	Enables data registration to a nominal +/- 15 feet accuracy level, GPS synched time stamping, and straightforward crew productivity measurement.



Sales Quote

Date: 07/14/17
Quote #: 2017-0714P2-GAC

Billing and Payment Address: 8116 South Tryon St, STE B3-203, Charlotte, NC 28273

Prepared for: City of Novi, MI	Contact Mr. Ben Croy	Phone # 248-735-5635	Fax #	Email bcroy@cityofnovi.org
Price List:	US Price List			
InfoSense Contacts Alex Churchill	Job Title COO	Phone # 336-302-0164	Fax # 704-930-0145	Email achurchill@infosense.com
Terms and Conditions		<div style="border: 1px solid black; padding: 5px;"> <p>All shipments are ARO, and subject to final verification upon receipt of order. All items will be shipped UPS ground unless otherwise specified. Please indicate whether partial shipment is acceptable. Shipping charges are Pre-Paid. An electronic copy of this quote may be provided for your convenience. InfoSense retains an original copy of all quotes and will consider the original to be the governing document.</p> </div>		
Shipment Terms:	FOB Your Dock			
Credit Terms:	Net 30			
Effective From:	07/14/17			
Valid Through:	09/12/17			

Line#	Part Number	Description	Qty.	Unit of Measure	Price	Net Price	Extended Price
1		SL-RAT Standard Package*	1	ea	\$ 23,750.00	\$ 23,750.00	\$ 23,750.00
2		2nd Battery Charger (Optional)	1	ea	\$ 175.00	\$ 175.00	\$ 175.00
3		Safety Yellow Foam Frame Cushion (Optional)	1	set	\$ 210.00	\$ 210.00	\$ 210.00
4		1/2 Day Training (Optional)	1	ea	\$ 850.00	\$ 850.00	\$ 850.00
5		Shipping and Handling	1	ea	\$ 325.00	\$ 325.00	\$ 325.00

* Price includes storage bag, 1 battery charger, 1 year limited warranty, & license for the SL-DOG** web portal software for 1 year from the date of purchase
 **SL-DOG software consists of two components. A local client runs on a PC. It downloads the SL-RAT data from the device and is provided at no charge.
 The second component is a cloudbased web portal set up for each customer at www.sl-dog.com that can assist with back office management of SL-RAT data after downloading. It includes the ability to edit measurement data, add manhole ID's, add comments, manage data quality, review productivity and export the SL-RAT data in a variety of formats including currently Google Earth kml and csv.

Post Year 1 - Optional Annual Support Agreement - \$3,000 per device - includes continued SL-DOG online software access, product servicing and repair discounts, up to 2 weeks of SL-RAT loaner use per year and continued product technical support.
 Yearly subscription to the optional SL-DOG software alone is \$800/year for up to two devices - Post Year 1.

***Shipping & Handling/Insurance via UPS Ground Service
 Excludes any additional applicable taxes, duties, or other government charges.

Comments: (All returned or exchanged items are subject to 25% restocking fee.)

Visit our website: www.infosense.com **WINNER 2012 WEF INNOVATIVE TECHNOLOGY AWARD**

NOTE: Effective May 1, 2016, InfoSense Inc. has moved its office. Please update your records using the address above.

Grand Total **\$25,310.00**



InfoSense, Inc

Innovating Acoustic Inspection Technology™

877-PIPECHK (877-747-3245)
www.infosenseinc.com

8116 South Tryon Street
Suite B3-203
Charlotte, NC 28273 USA

February 28, 2018

To Whom It May Concern:

InfoSense, Incorporated in Charlotte, North Carolina is the sole manufacturer, supplier and distributor of the Sewer Line Rapid Assessment Tool or SL-RAT® and its supporting software, the Sewer Line Data Organizer or SL-DOG™. Duke's Root Control is a manufacturer's representative for the state of Michigan, Ohio, and Indiana. You may contact them at (614) 354-3927 or email Bob Hunn at bob@dukes.com.

The SL-RAT® line of acoustic pipe inspection equipment is patent-protected under U.S. Patent #8220484 and other pending patents. InfoSense manufactures the only product that uses Active Acoustic transmissions between a transmitter and a receiver in adjacent pipes to provide an aggregate blockage assessment.

The SL-RAT® makes use of the fact that water and air flow similarly within a pipe. Our proprietary algorithms exploit this fact to assess blockage within a pipe segment – typically within 3 minutes or less and with no flow contact.

Sincerely,

Alex Churchill

CEO

InfoSense, Inc.

Past Winner WEF Innovative Technology Award

