

Pinpoint Identification of Infiltration and QA/QC of CIPP, Repairs & Rehabilitation



ES-620

AI-Based Sewer Pipe Leak Detection

- **ES-620** is a non-acoustic, non-visual machine-intelligent solution to locate & measures multiple leaks in a single pipe.
- **ES-620** utilizes a low-voltage, high frequency electrical current to locate all leaks with 1cm (0.4in) locational accuracy, including an estimated Gallons Per Minute.



Integrated to All Leading CCTV Trucks!

Aries

Cues

IBAK

Ipek

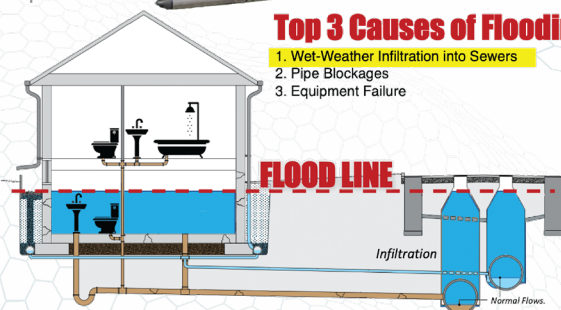
Rausch

Custom



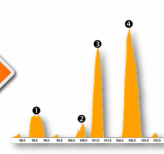
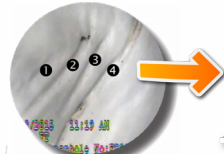
Top 3 Causes of Flooding

1. Wet-Weather Infiltration into Sewers
2. Pipe Blockages
3. Equipment Failure



ES-620

Leader in CIPP Certification as Watertight



critical sewer®									
Source	Distance	Probe	Seal	Manhole	Log	Total Distance	GPM	APD	APD/1000
13.875	2,491.227	19.562	227.599	64.150	64.157	345.876	412,922.79	594,464.759	6,758,895.938
Line #	Monitor ID	Probe ID	Probe Type	Distance	Flow	Leak	Leak	Leak	Leak
1070101	ES-620-1	ES-620-1	VCP	6	145	0	78	242	111
1070102	ES-620-2	ES-620-2	VCP	6	145	0	78	242	111
1070103	ES-620-3	ES-620-3	VCP	6	145	0	78	242	111
1070104	ES-620-4	ES-620-4	VCP	6	145	0	78	242	111
1070105	ES-620-5	ES-620-5	VCP	6	145	0	78	242	111
1070106	ES-620-6	ES-620-6	VCP	6	145	0	78	242	111
1070107	ES-620-7	ES-620-7	VCP	6	145	0	78	242	111
1070108	ES-620-8	ES-620-8	VCP	6	145	0	78	242	111
1070109	ES-620-9	ES-620-9	VCP	6	145	0	78	242	111
1070110	ES-620-10	ES-620-10	VCP	6	145	0	78	242	111
1070111	ES-620-11	ES-620-11	VCP	6	145	0	78	242	111
1070112	ES-620-12	ES-620-12	VCP	6	145	0	78	242	111
1070113	ES-620-13	ES-620-13	VCP	6	145	0	78	242	111
1070114	ES-620-14	ES-620-14	VCP	6	145	0	78	242	111
1070115	ES-620-15	ES-620-15	VCP	6	145	0	78	242	111
1070116	ES-620-16	ES-620-16	VCP	6	145	0	78	242	111
1070117	ES-620-17	ES-620-17	VCP	6	145	0	78	242	111
1070118	ES-620-18	ES-620-18	VCP	6	145	0	78	242	111
1070119	ES-620-19	ES-620-19	VCP	6	145	0	78	242	111
1070120	ES-620-20	ES-620-20	VCP	6	145	0	78	242	111
1070121	ES-620-21	ES-620-21	VCP	6	145	0	78	242	111
1070122	ES-620-22	ES-620-22	VCP	6	145	0	78	242	111
1070123	ES-620-23	ES-620-23	VCP	6	145	0	78	242	111
1070124	ES-620-24	ES-620-24	VCP	6	145	0	78	242	111
1070125	ES-620-25	ES-620-25	VCP	6	145	0	78	242	111
1070126	ES-620-26	ES-620-26	VCP	6	145	0	78	242	111
1070127	ES-620-27	ES-620-27	VCP	6	145	0	78	242	111
1070128	ES-620-28	ES-620-28	VCP	6	145	0	78	242	111
1070129	ES-620-29	ES-620-29	VCP	6	145	0	78	242	111
1070130	ES-620-30	ES-620-30	VCP	6	145	0	78	242	111
1070131	ES-620-31	ES-620-31	VCP	6	145	0	78	242	111
1070132	ES-620-32	ES-620-32	VCP	6	145	0	78	242	111
1070133	ES-620-33	ES-620-33	VCP	6	145	0	78	242	111
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1070137	ES-620-37	ES-620-37	VCP	6	145	0	78	242	111
1070138	ES-620-38	ES-620-38	VCP	6	145	0	78	242	111
1070139	ES-620-39	ES-620-39	VCP	6	145	0	78	242	111
1070140	ES-620-40	ES-620-40	VCP	6	145	0	78	242	111
1070141	ES-620-41	ES-620-41	VCP	6	145	0	78	242	111
1070142	ES-620-42	ES-620-42	VCP	6	145	0	78	242	111
1070143	ES-620-43	ES-620-43	VCP	6	145	0	78	242	111
1070144	ES-620-44	ES-620-44	VCP	6	145	0	78	242	111
1070145	ES-620-45	ES-620-45	VCP	6	145	0	78	242	111
1070146	ES-620-46	ES-620-46	VCP	6	145	0	78	242	111
1070147	ES-620-47	ES-620-47	VCP	6	145	0	78	242	111
1070148	ES-620-48	ES-620-48	VCP	6	145	0	78	242	111
1070149	ES-620-49	ES-620-49	VCP	6	145	0	78	242	111
1070150	ES-620-50	ES-620-50	VCP	6	145	0	78	242	111



Conveyance	Combined Sewer & Storm Systems, Separated Gravity Mains, Gravity Water Mains, Force Mains, Siphons, and Stormwater Networks.	
Required Flow	None. Dry, Partially, or Fully-Surcharged Flow. Aided by Jet Truck.	
Pipes	Pipe Diameters	ES-670: Up to 72 inch (1800mm) ES-660: 6 to 60 inch (150 to 1500mm) ES-650: 6 to 30 inch (150 to 800mm) ES-400: 4 to 16 inch (100 to 400mm)
	Pipe Shape	Any, including Circular, Box, Egg-shaped, Oval, and Trapezoidal.
	Pipe Materials	Any Electrically Non-Conductive Pipe Walls, including Asbestos Cement, Brick, Cement Mortar Lined and Coated Steel, Cured-In-Place Pipe, Ductile Iron with Epoxy Coatings, Fiberglass Reinforced Pipe, High-Density Polyethylene Pipe, Prestressed Concrete Cylinder Pipe, Polyethylene, Polyvinyl Chloride, Reinforced Concrete, Vitrified Clay Pipe, etc.
System Specification	Dimensions	ES-660 & ES-670 Length: 36 in (914mm); Diameter: 3 in (76mm)
	Scan Recording	Critical Sewers® Field Laptop PC, Wifi Connection to Critical Sewers® Cloud Application.
	Speed	45-60 ft/minute (15-20 meters/minute)
	Operating Temperature	20°F to 120°F (-7°C to 50°C)
	Power Supply	120VAC / 60Hz - or - 220VAC / 50Hz
	Range	1,500 ft (460m) range from single point of access.
	Current (max)	40 mA
	Electrical Array	Focused tri-electrode array
	Defect Flow Calculation	± 30% Accuracy measured in Gallons Per Minute (GPM) or Liters Per Second (LPS).
	Defect Location	ES-650 & ES-660 ±0.4 inches (1cm) ES-670 ±1 inch (2.5cm)

Certification of Leak-Free CIPP

