

Category	Feature	SAA	Manual Inclinerometers	In-place Inclinerometers	TDR
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Accuracy					
	High accuracy	Yes	Yes	Yes	No
	Calibrated	Yes	Yes	Yes	No
	Temperature and voltage compensated	Yes	Yes	Yes	No
	Location and magnitude	Yes	Yes	Yes	No
	No variation from insertion	Yes	No	Yes	No
	1 foot (30 cm) measurement intervals standard	Yes	No	No	No
	Resolves concentrated deformations	Yes	No	No	Yes
	Accurate after 5000 G drop on concrete	Yes	No	No	No
	No operator-data-entry errors	Yes	No	Yes	Yes

Versatility					
	Instrument re-useable after large deformations	Yes	Yes	No	N/A
	Casing re-useable after large deformations	Yes	No	No	N/A
	Fits in 1" (25 mm) borehole	Yes	No	No	N/A
	Autonomous, continuous operation	Yes	No	Yes	Yes
	Same instrument: Vertical or Horizontal	Yes	No	No	Yes
	Frequent data @ hundreds of locations along array	Yes	No	No	Yes
	360 degree operating range	Yes	No	No	Yes
	Vibration measurement	Yes	No	No	No
	Real-time high-speed data	Yes	No	No	Yes

Durability					
	Wheels eliminated	Yes	No	No	Yes
	Withstands large deformations	Yes	No	No	Yes
	Casing withstands buckling & shearing	Yes	No	No	N/A
	Entire array shielded with stainless braid	Yes	No	No	N/A
	Optional overall stainless braid no. 2	Yes	No	No	No
	Survives 700 pound (30 N) pull	Yes	Maybe	Maybe	No
	Accurate after 5000G acceleration shock	Yes	No	No	N/A

Ease of installation					
	Ships on a reel	Yes	No	No	N/A
	Insert calibrated array into inexpensive casing	Yes	No	No	N/A
	Multiple sensors in a calibrated system	Yes	No	No	No
	Multiple sensors on one small digital cable	Yes	No	Sometimes	N/A

Affordability					
	Low capital cost per sensor	Yes	No	No	Yes
	Low installation cost per sensor	Yes	No	No	Yes
	Low operating costs	Yes	Expensive site visits	Yes	Yes
	Inexpensive, small casing	Yes	No	No	N/A
	Operate without grooved casing	Yes	No	No	N/A
	Use in old deformed inclinometer casing	Yes	No	No	No
	Rotatable-surface 3D viewer software included	Yes	No	No	No
	Affordable web-based data delivery w/ 3D viewer	Yes	No	No	No
	Vibration FFT display included	Yes	N/A	N/A	N/A