

ADRESSABLE INCLINOMETER



Each SAA comes on a drum and is installed inside a small (27mm) diameter access tube that is grouted into a borehole or void former. SAA casings can also be installed inside inclinometer casings using spacers.

Installation and removal of SAA is extremely simple because there is no joining of individual sensors to be done in the field and the single wire output from an SAA means there is very little wiring to be done to complete the installation process.

SAAs can be used in vertical, horizontal and circular orientations. For inclined and near vertical orientations (< 60° to the vertical) SAAs record X, Y and Z coordinates of each joint and for horizontal arrays, settlement (e.g. X-Z, where Z represents distance along the array) can be recorded. Convergence can be measured in tunnels and sewers.

Displacements can be stored on dataloggers or read directly on computers. SAAs come in lengths of up to 150m. Long-term tests have shown that 32m long SAAs are accurate to $\pm 1.5\text{mm}$ and precise to $\pm 0.5\text{mm}$.

The SAA Field Power Unit (SAAFPU) is a portable unit designed to supply power to an SAA, and to convert communications protocols allowing for communication via USB between the SAA and a PC running the *SAARecorder* application in *SAASuite*.

It is designed for use in the field or in the office when manually collecting data from an SAA. The SAAFPFU contains a 12 V, 7 Ah non spillable rechargeable battery which is used to power the SAA.