

Eltek has developed and field-tested the following solutions for monitoring tilt and crack using the GS44 transmitter and third party sensors:



Tilt sensor

- Soil Instruments C12 inclinometer
- Measures tilt in g (gravity), output is in ° of tilt
- Automatic temperature compensation of (g) data
- Stainless Steel construction, waterproof to 2000kPa
 - Calibrated Range: $\pm 3^\circ$
 - Sensor accuracy: $\pm 0.05\%$ full scale
 - Operating temperature: -20 to $+80^\circ\text{C}$
 - Repeatability: $\pm 0.01\%$ full scale
 - Weight (without cable): 540g
 - Dimensions: 192mm x $\varnothing 32\text{mm}$
 - 10m max cable length



Crack sensor

- Penny & Giles Ltd SLS130 Linear displacement sensor
- Sealing to IP66 and corrosion resistant rod end bearings
- Cable integrally moulded
- 13mm body diameter
- Self aligning bearings
- Body clamp or flange mounting
- Spring operated shaft kit
- Protective sleeve
- Operating temperature: -30 to $+100^\circ\text{C}$
- Electrical stroke: 50mm = 0-2k Ω
- Shaft length: 173.6mm
- 10m max cable length
- Resolution: 0.0125mm (0-4000 bits). Displayed to 3 d.p.



GS44 transmitter

GS44cfTLT Transmitter

- 4 x inputs for Soil Instruments C12 inclinometers
- Hardware range: $\pm 2.5\text{V}$
- EU Range: $\pm 3.000^\circ$
- Resolution: 0.00075°
- 12V sensor supply
- 3 second sensor on (warmup) time

GS44 Transmitter specification

RF specification: EN300-220
 RF power: 10mW
 Environment specification
 Compliant to EN300-220: -10 to $+55^\circ\text{C}$
 Actual: -30 to $+65^\circ\text{C}$
 Humidity: 100% non condensing
 Environmental rating: IP40

GS44cfLDT Transmitter

- 4 x inputs for Penny & Giles SLS130 Linear displacement sensors
- 0-5V single range for 0-50.000mm
- Precision reference voltage for sensor: 5V
- 1 second sensor on time

ODTLT/LDT Includes:

- Enclosure (200 x 120 x 88mm). Rated IP60. Suitable for wall mount or free stand.
- GS44cfTLT / GS44cfLDT Transmitter
- SP1196 9VDC 6 x D cell battery pack. Provides > 1 year operation at 15 minute logging interval.