

The Tramex Dec Scanner is a mobile non-destructive impedance scanner designed for the instant surveying of moisture conditions in flat roofing and waterproofing systems per ASTM D7954. The Dec Scanner roof moisture meter detects and measures leaks within the roofing structure. Featuring three ranges of sensitivity and with a maximum depth penetration of 6" (152mm), the Dec Scanner enables the inspection of a variety of roof membranes and insulation thicknesses. Readings are instant and a flat roof area of up to 100,000 square feet can be reasonably covered in a day. As it is easy and safe to use with no regulatory restrictions or operating license required, the Dec Scanner is ideal for water leak detection and integrity testing in roofing materials.

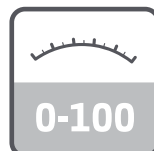


Product Order Code: DS2

## FEATURES



NON-DESTRUCTIVE



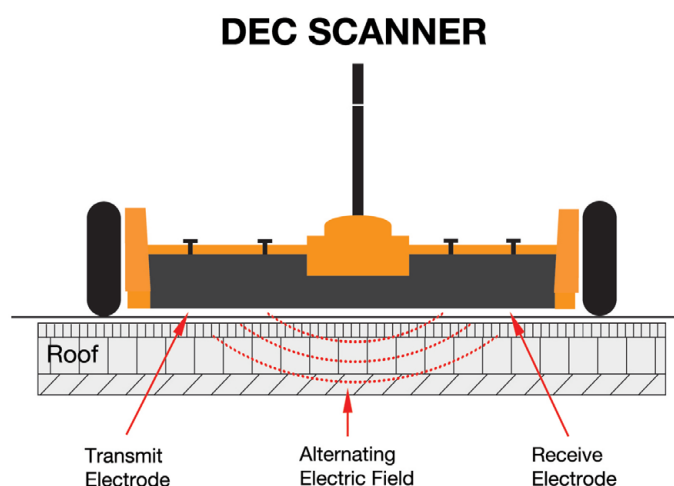
COMPARATIVE  
READING RANGE



VIEW ONLINE

# HOW IT WORKS

The Dec Scanner detects and evaluates the moisture conditions within roofing systems by non-destructively measuring the electrical impedance. A low frequency electronic signal is generated, transmitted into the material under test via one of the two electrodes incorporated in the rubber electrode mat, and received by the second electrode. The strength of this signal varies in proportion to the amount of moisture in the material under test. The Dec Scanner determines the strength of the current and converts this to a comparative moisture content value. By moving the Dec Scanner across a roof surface in a regular pattern, a continuous reading is obtained, and areas that contain moisture can be readily identified.



## OPERATING PROCEDURE

Moisture detection testing can be done at the time of installation for warranty auditing and quality control, as part of an ongoing maintenance program, or prior to re-roofing or repair of damaged roofs.

The Dec Scanner is a durable but lightweight instrument that is easily transported to the roof surface. Having determined a known acceptably dry area, one of three sensitivity ranges is selected, and the Dec Scanner is ready to use. Without causing any damage to the roof surface, the Dec Scanner is moved over the tested area. The Dec Scanner gives continuous moisture condition readings, from which a moisture map of the surface can be drawn up, and leaks traced to their source.

## RANGE SELECTION

The Dec Scanner has an integrated and adjustable calibration ability allowing for precise comparative readings. There are 3 Ranges, and they should be selected as best suits the surface under test, for example:

- **Range 1** - Most suitable for single-ply and thin roof coverings such as PVC, Hypalon and other smooth surfaces where insulation is wet and moisture is close to the surface.
- **Range 2** - Most suitable for multi-ply built-up and modified systems, mineral surfaced felts, and other smooth or gravel surfaces where insulation is less wet and moisture is below the surface.
- **Range 3** - Most suitable for thicker roof coverings such as mastic asphalt, thick gravel and stone surfaced roofing.

## SPECIFICATIONS

Size:	762 mm x 400 mm x 158 mm (30"W x 15¾"D x 6¼"H)
Scanning area:	609 mm x 394mm (24"W x 15.5"D)
Carry case:	940mm x 508 mm x 270mm (38"W x 20"D x 10"H)
Weight: Dec Scanner	9.95 Kg (24.6 lbs)
Weight: Carry Case	9.9 Kg (21.9 lbs)
Total Weight: Dec Scanner in Carry Case	21.1 Kg (46.5 lbs)
Outer packaging carton weight:	2 Kg (4.4 lbs)
Total shipping weight:	23.1Kg (51 lbs)
Dimensional shipping weight:	30 Kg (66 lbs)

## MEASURING RANGE

Display:	Analog
Measuring Range:	0 to 100 Comparative
Max. depth of penetration:	152 mm (6")
Power Supply:	2 x 9 Volt PP3 Batteries (included)
Limitations:	Some EPDM, Butyl rubber roofing and other conductive roofing.

