Interdigitated electrodes on glass substrate

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Ref. G-IDEAU5, G-IDEAU10, G-IDEPT5, G-IDEPT10, G-IDEAG5, G-IDECU5

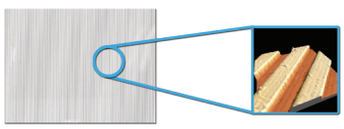
Metrohm DropSens interdigitated electrodes (IDEs) are composed of two interdigitated electrodes with two connection tracks, made of same material, on a glass substrate.

Two dimensions of bands/gaps are available: 5 μm and 10 μm in gold or platinum (ref. G-IDEAU5, G-IDEAU10, G-IDEPT5, G-IDEPT10) and 5 μm in silver or copper (ref. G-IDEAG5 and ref. G-IDECU5).

Glass substrate dimensions: L 22.8 × W 7.6 × H 0.7 mm

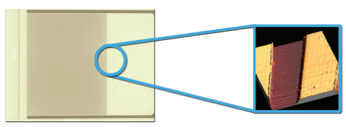
According to Zaretsky's definition of K_{cell} and by mathematical calculation:

Cell constant for 5μm IDE: 0.0059 cm^{-1}
Number of digits: 250 x 2
Digit length: 6760μm



Stereo microscope (left) and AFM 3D (right) images of G-IDEPT5, 5 µm bands/gaps IDE

Cell constant for 10μm IDE: 0.0188 cm^{-1}
Number of digits: 125 x 2
Digit length: 6760μm



Stereo microscope (left) and AFM 3D (right) images of G-IDEAU10, 10 µm bands/gaps IDE

The interdigitated electrodes are commercialized in packs of 20 units. They should be stored at room temperature, protected from light in a dry place.

Due to the small distances between fingers of these electrodes, they are thought to be used in clean room.

Specific cable connectors that act as an interface between interdigitated electrodes and any potentiostat (ref. CACIDE) are available at Metrohm DropSens.

Metrohm DropSens