**Snow fork instrument**

* The snow fork portable instrument has been used in the field to measure the snow pack parameters. This instrument measures the resonant frequency, attenuation and 3-db bandwidth, which have been further used to calculate the complex dielectric constant.
* The snow wetness and density is further calculated using the semiempirical equations.
* This instrument is intended to work in extreme climate conditions extending from downpour to -40degree.
* This instruments measurements are reliable because, it doesn’t compress snow pack and the measurement is easily repeatable the result can be checked by calibration measurement in the air.