

z8000 Electrical Resistance Tomography



Electrical Resistance Tomography:

Parameter	Conductivity
Process Environment	Conducting (solutions)
Typical Processes	Multi-phase, slurry transportation
Sensor	Internal
Reference	Single (mean)
Also sensitive to	Temperature

z8000

The z8000 is essentially a resistance tomography instrument that can also measure impedance; phase and reactance. Impedance can measure real and imaginary parts, which gives another set of data to understand complex materials and how they are distributed in the course of a process.

The z8000, can capture data 1,000 dual frames per-second, which enables it to measure rapid flows or any process which is fast moving.

In contrast to many systems-based measurement techniques, tomography sensors are able to rapidly sense throughout a volume. Thus providing a dynamic picture of what is going on inside a pipe or vessel, e.g. whether a system is homogeneous.

Product Characteristics

Single modality (ERT)	
Max No of electrodes:	32; 16 x 2 planes arranged in 1 and 2 planes

Sensor Geometry:

- Circular

Applications

- Multiphase flow characterisation
- Interface Detection
- CFD Validation
- Hydraulic Conveying
- Filtration

Industries:

- Oil & Gas
- Nuclear
- FMCG
- Mining
- Others...

Benefits to users are:

- Measurement of rapid flows
- Increased process understanding
- More effective process development
- Improved and more consistent product quality