

Magnetic Imaging of Powered Welds & Solder Joints

Inspect electrical contacts **while they carry current** — no probes, no contact, at full production-line speed.



SOLAR PANEL — CELL STRINGING & SOLDER

PV ribbon / tabbing

String of soldered PV cells

cold / voided solder joint

SENCAM field image — |B| from flowing current

GOOD — uniform field

low |B| high |B| (current crowding / hotspot)

- Detects cold / voided solder joints, broken ribbons & micro-cracks
- Reveals current crowding & hotspots across the whole cell string
- 100% in-line GOOD/BAD — non-contact, no shadowing of the cell

EV BATTERY — BUSBAR WELD MONITORING

laser / ultrasonic weld

Welded busbar over battery cells

insufficient / lack-of-fusion weld

SENCAM field image — |B| from flowing current

GOOD welds

low |B| high |B| (current crowding / hotspot)

- Flags insufficient / lack-of-fusion welds & high-resistance joints
- Maps current sharing across parallel busbar welds
- Catches weak contacts that overheat and fail in the field

SENCAM SEN-3D-CAM	16k	27×9×4 μm	7 img/s	Bx·By·Bz	Tileable	Lab + line
3D Magnetic Field Camera	pixels	voxel / pixel	acquisition rate	true 3-axis	for large panels	production ready