

## Nanocrystalline Current Transformer Cores

The TRANS-X transformer core produced with Cergen  $\mu$ -Sphere™ material technology has good magnetic permeability, good linearity and high accuracy, but its manufacturing cost is far lower than that of permalloy, which is the most ideal soft magnetic material for precision current transformers.



### Performance Characteristics:

- High magnetic saturation value
- High linearity, suitable for high-precision meter
- High  $\mu$ , compact size, less winding cost
- Can be used at high temperatures ( $> 90^{\circ}\text{C}$ )
- High thermal stability, less affected by ambient temperature

### Application areas:

- Ammeter
- Energy meter
- Residual current detection table
- Medium and small power PV inverters

Cergen TRANS-X Current Transformer Cores Typical Products

P/N	Protection	Do (mm)	Di (mm)	H (mm)	Material
TK5002-01	Coated	13,3	9,5	6,0	Nanocrystalline
TK5006-01	Coated	32,3	22,7	7,2	Nanocrystalline
TK5007-01	Coated	37,5	28,5	16,5	Nanocrystalline
TK5008-01	Coated	91,5	78,5	16,5	Nanocrystalline
TS5106-01	Case	54,5	31,0	34,5	Nanocrystalline
TK5120-02	Coated	18,5	9,0	8,5	Nanocrystalline
TK5123-01	Coated	125,0	115,5	15,5	Nanocrystalline

## Current Transformers

The linear transformer made of nanocrystalline closed-loop magnetic core has higher accuracy level than Hall sensor at low current, especially in precision measurement system.

### Application area:

- Ammeter
- Electricity meter
- Residual current detection meter

