



## Nanocrystalline Current Transformer Core

### Characteristic

Saturate induction / Bs (T)	1.25	Saturation Magnetostriction ( $\lambda_s$ )	$2.0 \times 10^{-6}$
Curie temperature Tc (°C)	570	Density $\rho$ (g/cm <sup>3</sup> )	7.2
Crystalline temperature Tx (°C)	500	Resistivity $\delta$ ( $\mu\Omega \cdot \text{cm}$ )	130
Hardness Hv	880	Thickness ( $\mu\text{m}$ )	28~35
Initial permeability ( $\mu_0$ )	$> 12 \times 10^4$	Stacking factor	$\geq 0.75$

### Nanocrystalline CT Core B-H Data Table

H (mA/cm)	B (Gs)	$\mu$ ( $\times 10^4$ )	H (mA/cm)	B (Gs)	$\mu$ ( $\times 10^4$ )	H (mA/cm)	B (Gs)	$\mu$ ( $\times 10^4$ )
0.39	50	10.20	0.77	100	10.33	1.39	200	11.45
1.85	300	12.90	2.27	400	14.02	2.62	500	15.19
2.87	600	16.64	3.16	700	17.63	3.38	800	18.83
3.61	900	19.84	3.81	1000	20.89	4.01	1100	21.83
4.38	1300	23.62	4.75	1500	25.13	5.06	1700	26.74
5.35	1900	28.26	5.57	2100	30.00	5.86	2300	31.23
6.11	2500	32.56	6.34	2700	33.89	6.57	2900	35.13
6.82	3100	36.17	7.05	3300	37.25	7.28	3500	38.26
7.56	3700	38.95	7.85	4000	40.55	8.22	4300	41.63
8.64	4600	42.37	9.04	4900	43.13	9.41	5200	43.97
9.84	5500	44.48	10.29	5800	44.85	10.74	6100	45.20
11.06	6300	45.33	11.43	6500	45.25	11.97	6800	45.21
12.51	7100	45.16	12.85	7200	44.59	13.31	7400	44.24
13.79	7600	43.86	14.36	7800	43.22	14.98	8000	42.50
15.66	8200	41.67	16.43	8400	40.68	17.2	8600	39.79
18.31	8800	38.25	19.47	9000	36.78	20.15	9100	35.94
20.98	9200	34.90	21.8	9300	33.95	22.74	9400	32.89
23.68	9500	31.93	24.73	9600	30.89	25.95	9700	29.75
27.43	9800	28.43	29	9900	27.17	30.7	10000	25.92
32.63	10100	24.63	35.3	10200	22.99	38.17	10300	21.47
41.47	10400	19.96	45.36	10500	18.42	50.25	10600	16.79
53.67	10700	15.87	58.59	10800	14.67	62.5	10900	13.88
68	11000	12.87						



# Nanocrystalline Current Transformer Core

## Specification

Transmart Part number	Core dimensions		weight m <sup>Fe</sup> g	Case material
	Core dimensions d <sub>a</sub> x d <sub>i</sub> x h mm x mm x mm	Finished core size OD ID H mm x mm x mm		
NR-0004	19x14x6.5	22.2x12x9	4.8	PBT
NR-0007	21x16x10	23.8x14.5x12.5	8.3	PBT
NR-0008	20x14x10	23.5x12.5x12.5	9.1	PBT
NR-0012	26x19x10	29x16.5x12.5	14.0	PBT
NR-0014	40x30x10	43x27.5x12.5	32.0	DMC
NR-0017	40x30x15	43x27.5x17.5	47.0	DMC
NR-0019	83x38x40	88x34x45	967.0	DMC
NR-0020	71x39x33	76x35x38	516.0	DMC
NR-0021	70x42x30	75x38x35	418.0	DMC
NR-0022	68x45x30	73x41x35	347.0	DMC
NR-0023	68x45x25	73x41x30	289.0	DMC
NR-0024	78x60x25	83x56x30	276.0	DMC
NR-0025	80x60x30	85x56x35	402.0	DMC
NR-0026	82x63x30	87x59x35	396.0	DMC
NR-0027	70x40x25	75x36x30	367.0	DMC
NR-0028	82x45x50	87x41x55	1043.0	DMC
NR-0029	82x45x30	87x41x35	674.0	DMC
NR-0030	85x45x60	90x40x65	1492.0	DMC
NR-0031	85x50x30	90x46x35	678.0	DMC
NR-0032	80x50x35	85x46x40	653.0	DMC
NR-0033	86x60x40	91x56x45	725.0	DMC
NR-0034	78x60x35	83x56x40	386.0	DMC
NR-0038	115x85x20	120x81x25	533.0	DMC
NR-0119	78x60x30	83x56x35	357.0	DMC
NR-0120	88x50x40	93x46x45	1003.0	DMC
NR-0121	120x95x20	125x91x25	514.0	DMC
NR-0122	83x30x50	88x26x55	1432.0	DMC
NR-0123	80x50x30	85x46x35	560.0	DMC
NR-0125	80x50x25	85x46x30	467.0	DMC
NR-0126	90x73x30	95x69x35	398.0	DMC
NR-0128	90x43x40	95x39x45	1196.0	DMC
NR-0129	88x60x35	93x56x40	694.0	DMC
NR-0130	110x90x45	115x86x50	861.0	DMC
NR-0131	100x75x20	105x71x25	419.0	DMC
NR-0137	115x85x25	120x81x20	718.0	DMC
NR-0138	120x95x15	125x91x20	386.0	DMC
NR-0139	120x85x20	125x81x25	687.0	DMC
NR-0078	265x210x10	271x203x17	1249.0	Stainless Steel
NR-0079	220x180x20	227x172x25	1530.0	Stainless Steel
NR-0080	220x180x30	227x172x35	2295.0	Stainless Steel
NR-0086	560x470x12	572x458x18	5318.0	Stainless Steel

Note: Customized sizes available.