

	Application	Cryostat/magnet	Surface layer	Dimensions [mm]	Part numbers for CPWs with SMA family connectors	Part numbers for CPWs with push-on connectors
	FMR ISHE Rotation, e.g. for angular FMR ⁸ GSG bonding	Room temperature electromagnets Quantum Design PPMS/Versalab Quantum Design MPMS3 Montana Instruments Cryostation MicroSense VSM	Gold, no insulation Gold, 20 μm insulation Bumps	Width at sample Length to sample Max width Max sample area	SMA SMA NM ⁵ 2.92 mm 2.4 mm 2.4 mm NM ⁵	SMP SMPM
CPW Standard	✓	✓	v5	20.6 19 30 17 x 13	00101 00106 00102 00104 00105	
CPW Standard	✓	✓	v7	16 19 28 12 x 12	00101 00106 00102 00104 00105	
CPW ISHE	✓ ✓	✓	v6	20.6 19 30 14 x 11	00201 00206 00202 00204 00205	
CPW narrow ISHE	✓ ✓	✓	v7 ✓ ¹	13 25 13 12 x 12	02101 02106 02102 02104 02105	
CPW large magnet	✓	✓	v6	16.6 43 29 14 x 12	00801 00806 00802 00804 00805	
CPW PPMS IP	✓	✓ ²	v6 v7	12.8 12 x 9		00301 ⁶
CPW PPMS OOP	✓	✓ ²	v6 v7	15.2 11 x 7		00401 ⁶
CPW PPMS IP ISHE	✓ ✓	✓	v7 ✓ ¹	12.9 12 x 9		01001 ⁶
CPW PPMS rotation		✓	v6	15.2 4 x 5		01701 ⁷
CPW PPMS STO		✓	v6	15.2 6 x 7		01801 ⁷
CPW MPMS IP	✓	✓ ³	v7	8.3 6 x 6		01201 ⁷
CPW MPMS OOP	✓	✓ ³	v7	8.3 4 x 2		01301 ⁶
CPW MPMS IP ISHE	✓ ✓	✓	v7 ✓ ¹	8.3 6 x 6		01401 ⁷
CPW MI	✓ (✓) ⁴	(✓) ⁴ ✓	v5	10.5 15 17.4 14 x 7		00501
CPW MI ISHE	✓ ✓ (✓) ⁴	(✓) ⁴ ✓	v7 ✓ ¹	10.5 15 17.4 13 x 7		00701
CPW MI STO	(✓) ⁴ ✓	(✓) ⁴ ✓	v6	10.5 14.6 17.4 10 x 10		01901
CPW MI external magnet	✓ (✓) ⁴	(✓) ⁴ ✓	v6	8.6 13.9 8.6 8 x 5		00602

¹. Next to the RF signal line there are contact pads with bumps raised 20 μm above the insulating layer for making electrical contact to the sample.

². These two CPWs are included with the FMR probe for the PPMS/Versalab

³. These two CPWs are included with the FMR probe for the MPMS3

⁴. Primarily for the Cryostation but could also be used with room temperature electromagnets, in which case angular analysis could be possible

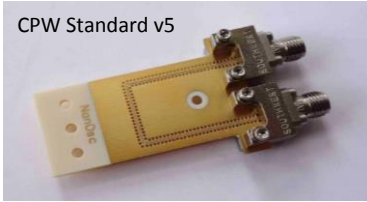
⁵. Non-magnetic connectors. Note that there are no 2.92 mm non-magnetic connectors

⁶. Soldered coax cables have SMPM connectors to fit in the FMR probes for the PPMS/Versalab and MPMS3.

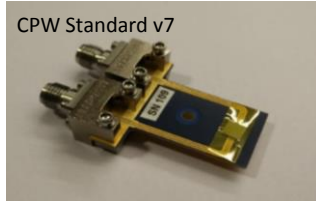
⁷. Coax cables with SMPM connectors are included in the probe kit to fit the FMR probes for the PPMS/Versalab.

⁸. The current PhaseFMR software does not have support for motorized rotation nor extraction of rotation angle dependent FMR parameters.

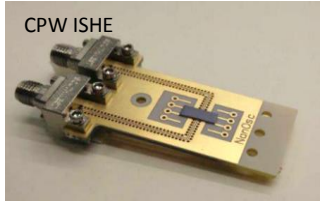
CPW Standard v5



CPW Standard v7



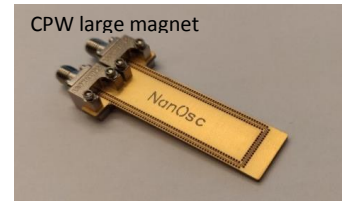
CPW ISHE



CPW narrow ISHE



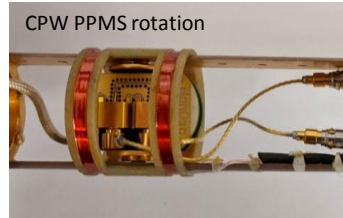
CPW large magnet



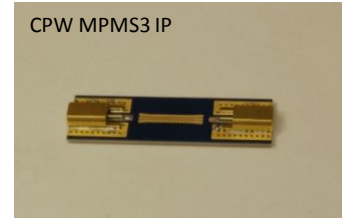
CPW PPMS IP



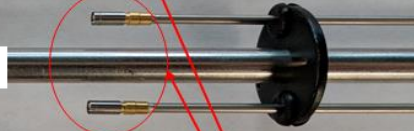
CPW PPMS rotation



CPW MPMS3 IP



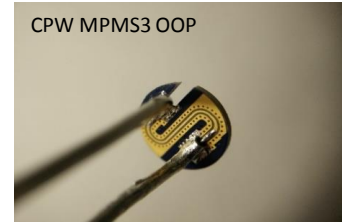
Modified MFP



CPW PPMS STO



CPW MPMS3 OOP



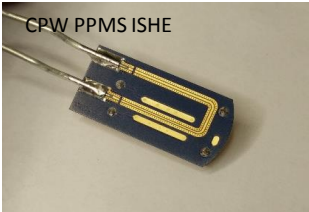
CPW PPMS OOP



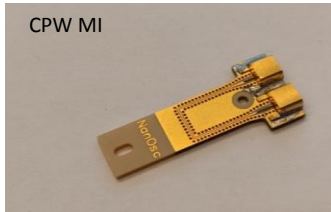
SMPM Type Connectors

Nanosc Instruments

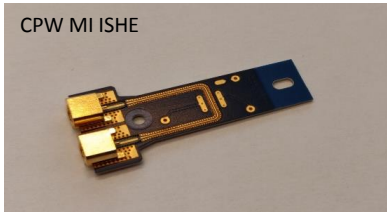
CPW PPMS ISHE



CPW MI



CPW MI ISHE



CPW MI STO



CPW MI external magnet

