

CPL230 Compact, Multi-Channel Sensor

Up to six channels
Separate power and signal connectors
OEM and embedded application
Small Size, high-density package
No user adjustments
±5V single-ended output, ±10V differential output

CPL350 Compact, Single-Channel Sensor

OEM and embedded applications
±10V single-ended
BNC output
±10 V differential D-Sub output
no user adjustments
small size
high-density package

Specifications

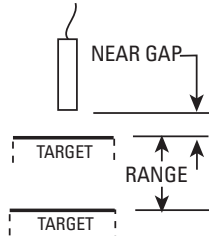
Resolution :	0.0007% @ 100 kHz 0.004% @ 15 kHz
Selectable Bandwidth:	Hz, 1, 10, 15, 100 kHz
Linearity :	<0.5% F.S. typical
Probe Drift:	0.04% F.S./°C
Operating Temp:	4-50°C
Output:	±10 V Differential ±5 V Single-Ended
Input Power ³ :	±15 VDC, 500mA max

1. Dependent on probe, range, and bandwidth. See next page for details.
2. Dependent on probe and range. See next page for details.
3. External power supply included. See next page for details.

Listed specifications assume a two meter probe cable;
Flat measurement area diameter at least 1.3 times larger
than the Sensing Area diameter with no customizations.

Export License

Because of high resolutions, export of the CPL230/350 to some countries require an export license.



CPL230/350 Probe Measurement Ranges and Resolutions

C5S

Shape: C = Cylindrical, R = Rectangular
 Size in mm: C = Diameter, R = Longest Side
 Body Style: Blank = Long, S = Short, R = Right Angle

Sensing Area Diameter mm	Measurement Range			Resolution ¹ @ Bandwidth				Linearity	Available Body Sizes	
	Range Type	Range μm mils	Near Gap μm mils	100 Hz nm μin	1kHz nm μin	10kHz nm μin	15kHz nm μin		Models	Body Styles
0.5	Fine	10 0.4	20 0	0.08 0.003	0.14 0.006	0.56 0.022	0.70 0.028	1.0	C3S C3R C5S C5R C5	
	Standard	50 2.0	50 2.0	0.42 0.017	0.70 0.028	4.2 0.17	5.6 0.22	0.50		
	Extended	80 3.0	60 2.4	0.70 0.028	1.4 0.056	7.0 0.28	—	0.50		
0.8	Fine	25 1.0	75 3.0	0.28 0.011	0.70 0.028	1.7 0.070	2.1 0.084	0.50	C3S C3R C5S C5R C5	
	Standard	100 4.0	100 4.0	0.70 0.030	1.4 0.056	4.9 0.20	7.0 0.28	0.50		
2.0	Ultrafine	10 0.4	20 0.8	0.07 0.003	0.11 0.004	0.21 0.008	0.35 0.014	1.0	C5S C5R C5 C8S C8R C8	
	Fine	50 2.0	75 3.0	0.28 0.011	0.42 0.017	0.84 0.034	1.4 0.056	0.30		
	Standard	250 10.0	125 5.0	1.1 0.04	0.56 0.060	5.6 0.22	7.0 0.28	0.30		
	Extended	500 20.0	125 5.0	2.1 0.084	4.2 0.17	11 0.44	14 0.56	0.30		
3.2	Fine	50 2.0	125 5.0	0.35 0.014	0.56 0.022	1.4 0.056	2.2 0.073	0.30	C8S C8R C8	
	Standard	500 20.0	250 10	2.8 0.11	4.2 0.17	8.4 0.37	14 0.56	0.30		
	Extended	1250 50.0	250 10	14 0.56	21 0.84	28 1.1	42 1.7	0.30		
5.6	Fine	50 2.0	225 9.0	0.42 0.017	0.56 0.022	1.1 0.44	1.8 0.072	0.30	C9.5S C9.5R C9.5 R20	
	Standard	500 20.0	500 20	3.5 0.14	4.2 0.17	9.8 0.39	14 0.56	0.30		
	Extended	2000 80.0	250 10	9.8 0.39	14 0.56	28 1.1	42 1.7	0.30		
13	Fine	2000 80	2000 80	28 1.1	42 1.7	49 2.0	56 2.2	0.50	C18	
	Standard	3200 125	2000 80	42 1.7	56 2.2	70 2.8	84 3.4	0.50		
	Extended	5000 200	3000 120	100 4.0	140 5.6	180 7.3	210 8.4	0.50		
19	Standard	2500 100	5000 200	70 2.8	100 3.9	100 5.0	140 5.6	0.50	R45	
	Extended	6000 250	3000 120	130 5.2	170 6.7	100 9.0	250 10	1.0		
21	Standard	8000 300	5000 200	100 4.0	140 5.6	180 7.3	210 8.4	0.50	C25	
	Extended	12500 500	5000 200	180 7.3	250 10	320 13	350 14	0.50		

Resolution values are RMS. Peak-to-peak values are typically 8-10 times greater than the RMS values.
 In high EMI conditions (10 V/m) output DC level may shift and noise may rise to 0.2 VRMS (1.3% resolution).