

# CAPACITIVE DRIVER

## CPL230

### Compact, Multi-Channel Driver

- Separate power and signal connectors
- OEM and embedded application
- Small Size, high-density package
- No user adjustments
- $\pm 5V$  single-ended output,  $\pm 10V$  differential output



## CPL350

### Compact, Single-Channel Driver

- OEM and embedded applications
- $\pm 10V$  single-ended
- BNC output
- $\pm 10V$  differential D-Sub output
- No user adjustments
- Small size
- High-density package



## Specifications

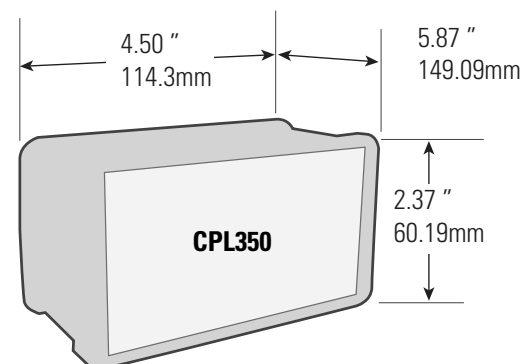
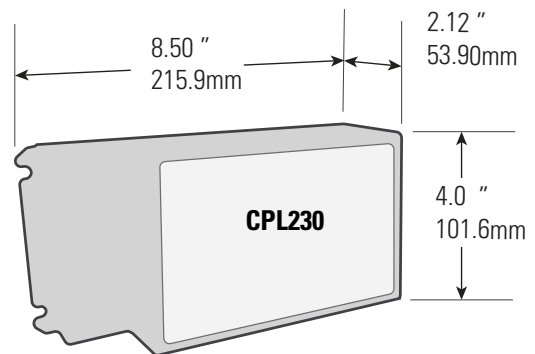
Resolution <sup>1</sup> :	0.0007% @ 100 kHz
	0.004% @ 15 kHz
Selectable Bandwidth:	100 Hz, 1, 10, 15 kHz
Linearity <sup>2</sup> :	<0.5% F.S. typical
Probe Drift:	0.04% F.S./°C
Operating Temp:	4-50°C
Output:	$\pm 10 V$ , Differential
	$\pm 5 V$ , Single-Ended
Input Power <sup>3</sup> :	$\pm 15 VDC$ , 500 mA 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 with no customizations.



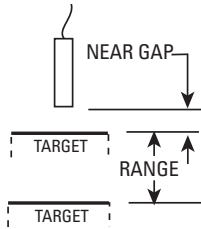
## Export License

Requires and export license.

# CPL230/350

## Probes and Ranges

Sensing Area



### 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 <sup>1</sup> @ Bandwidth				Linearity	Available Body Sizes	
	Range Type	Range $\mu\text{m}$ / mils	Near Gap $\mu\text{m}$ / mils	100 Hz nm / $\mu\text{in}$	1 kHz nm / $\mu\text{in}$	10 kHz nm / $\mu\text{in}$	15 kHz nm / $\mu\text{in}$		Models	Body Sizes
0.5	Fine	10 0.4	20 0.8	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	1.4 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 0.1.1	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).