

# Electronics Overview

## for PD Flowmeters

### Electronics Selection

Flow Technology provides a wide variety of amplifiers, transmitters, and displays to meet each customer's unique needs. Use the chart below to determine which electronics offering best suits your needs by matching the desired characteristics. The summary specification can then be viewed within this document. Once the desired electronics option has been selected, see the individual specification sheet for a complete specification.

Characteristics		PD Flow Meter Electronics Options				
		Pickoffs/Amps		Transmitters	Displays	
		Pickoff	PA03	TWA	BR30	SL90
Type	Rate Display				✓	✓
	Total Display				✓	✓
	Batch Control					✓
Power Source	DC	✓	✓		✓	✓
	Loop Powered			✓	✓	
	110 VAC					✓
	220 VAC					✓
	Battery				✓	
Outputs	Square wave pulse	✓	✓			
	Scaled pulse				✓	✓
	4-20 mA			✓	✓	✓
	RS232					✓
Approvals	CE	✓		✓	✓	✓
	FM	✓		✓	✓	
	CSA	✓			✓	
Mounting	Panel				✓	✓
	Meter-mounted	✓		✓	✓	
	Remote			✓	✓	✓



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## CA03

- Conditions magnetic pickoffs
- Long range transmission (over 1 mile/1.6 km)
- 10 volts pulse output, frequency proportional to flow rate



- Remote mounted or integral with flowmeter
- Reverse voltage protected
- Lightweight polypropylene, NEMA 4X or explosion-proof enclosures
- 24 VDC powered

## TWA

- Isolated 4–20 mA output
- Reverse polarity protected
- Frequency input from modulated carrier or magnetic pickoffs
- Available in potted module or polypropylene, NEMA 4X and explosion-proof enclosures



- Long range transmission with noise immunity
- Loop-powered 12–50 VDC
- Compact module utilizing surface mount technology
- Approvals: FM/CSA/CENELEC approved for intrinsically-safe requirements and CE conformity per the EU EMC Directive

## BR3000

- Magnetic pickup and DC pulse (optically isolated) input
- Displays rate & total simultaneously
- Internal battery, external DC, or 4–20 mA loop-power supply Isolated scaled pulse or 4–20 mA analog output
- 8-digit totalizer display



- 4-1/2 digit rate display
- 10-point linearization
- Low battery indicator
- Explosion-proof, waterproof, and panel mounting options
- Lockout code

## SL9000/9100/9200

- SL9000 - Din enclosure with two-piece wiring connector
- SL9000 - Windows-based PC programming software
- SL9000 - AC or DC powered
- SL9100 and SL9200 add - Liquid, temperature compensation for viscosity and density
- SL9100 and SL9200 add - Strouhal – Roshko temperature compensation



- SL9100 and SL9200 add - 40-point linearization
- SL9100 and SL9200 add - Analog and RTD input for temperature
- SL9100 and SL9200 add - Volumetric or mass display and output
- SL9200 add - Gas, temperature and pressure compensation for viscosity and density
- SL9200 add - Analog input for pressure



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