Laurel High Performance DPMs

- ±99999 Display Span
- 60 Readings Per Second
- 10 Input Types Available
- Adaptive Digital Filter
- 1/8 DIN, NEMA-4X Front
- 5, 10, 24V DC Excitation Out
- All Outputs Isolated
- 2 or 4 Setpoint Relay Outputs
- Linearized Analog Output
- USB, RS-232, RS-485 or Ethernet Data I/O
- Custom Curve Linearization
- Jumper Selectable Input Range
- Datalogging PC Software

Laureate™ DPMs offer exceptional accuracy at high reading rates. Advanced programming features provide flexibility in measuring DCV, ACV, DCA, ACA, temperature, weight, strain, process & pot follower.

SPECIFICATIONS

Display	Five 14.2 mm (.56") high LED digits
A-to-D Conversion	
A-to-D rate	60/s at 60 Hz, 50/s at 50 Hz
Display update	3.5/s at 60 Hz, 3/s at 50 Hz
Accuracy at 25°C	
DC, Process	< 0.01% FS ±1 count
Strain, Load	< 0.01% FS ±1 count
True RMS	< 0.1% FS (10 Hz-10 kHz)
	CF = 3.0 at full scale (AC or DC coupled)
Thermocouple	< 0.2°C
RTD	< 0.1°C
Noise Rejection	
CMR, DC to 60 Hz	130 dB
NMR to 50/60Hz line	90 dB with min filtering
Transducer Excitation Output (std)	
Output	100 mA @ 5V, 120 mA @ 10V, 50 mA @ 24V
Relay Output (optional)	
Contact relays .	8A @ 250 Vac or 24 Vdc
Solid state relays	0.12A @ 140 Vac or 180 Vdc
Linerarized Analog Output (optional)	
Level	0-20 mA, 4-20 mA, 0-10 Vdc, ±10 V
Resolution	16 bits (0.0015%)
Environmental	
Operating temperature	0 – 55°C, <95% RH at 40°C, non-condensing
Data Communications (optional)	
Type	USB, RS-232, RS-485 (2- or 4-wire), Ethernet
Protocol	Modbus RTU, Modbus ASCII, Laurel ASCII, Modbus TCP (Ethernet)

ACCESSORIES

CBL01	RJ11 TO DB9 Cable to PC Com port
CBL02	USB to DB9 Adapter
CBL05	USB Cable to PC USB Port

ORDERING INFORMATION

Select Code for each category to build part number. Example: L10010DCV1

☐ Laureate Series	L	Laureate Panel Meter
	LW	Laureate Weight Meter
☐ Main Board	1	Extended DPM with green LEDs
	2	Extended DPM with red LEDs
☐ Power	0	85-264 Vac/90-370 Vdc
	1	10-48Vdc/12-30 Vac
☐ Setpoint Output	0	None
	1	Two 8 A form C relays
	2	Two 120mA solid state relays
	3	Four 8 A form A relays
	4	Four 120mA solid state relays
☐ Analog Output	0	None
	1	0-20 mA, 4-20 mA, 0-10 V, -10 to +10 V
☐ Digital Interface	0	None
	1	RS-232
	2	RS-485 (dual RJ11 connectors)
	4	RS-485 (Dual RJ45 connectors)
	5	USB
	6	USB to RS-485 Converter
	7	Ethernet
	8	Ethernet to RS-485 Converter

☐ Input Type

DC Volts*	DCV1	200.00 mV	DCV2	2.0000 V
	DCV3	20.000 V	DCV4	200.00 V
	DCV5	600.0 V**	DCV6	300.0 V
DC Amperes*	DCA1	2.0000 mA	DCA2	20.000 mA
	DCA3	200.00 mA	DCA4	5.000 A

RTD*	P385C	Pt100, -202 to 850°C	N672C	Ni120, -100 to 260°C
	P385F	Pt100, -331 to 1562°F	N672F	Ni120, -148 to 500°F
	P392C	PT100, -202 to 850°C	C427C	Cu10, -100 to 260°C
	P392F	Pt100, -331 to 1562°F	C427F	Cu10, -148 to 500°F

Thermocouple*			
	JC	-210 to 760°C	EF	-400 to 1830°F
	JF	-347 to 1400°F	NC	-245 to 1300°C
	KC	-244 to 1372°C	NF	-410 to 2370°F
	KF	-408 to 2501°F	SC	-46 to 1768°C
	TC	-257 to 400°C	SF	-51 to 3214°F
	TF	-430 to 752°F	RC	-45 to 1768°C
	EC	-240 to 1000°C	RF	-49 to 3213°F

Note: The same temperature signal conditioner board can be user configured for all T/C and RTD types

TRMS Volts*	RMV1	200.00 mV	RMV2	2.0000 V
	RMV3	20.000 V	RMV4	200.00 V
	RMV5	600.0 V**	RMV6	300.0 V
TRMS Amperes*	RMA1	2.0000 mA	RMA2	20.000 mA
	RMA3	200.00 mA	RMA4	5.000 A

Note: The same AC RMS signal conditioner can be user-configured for AC Volts or Amps

Process Signals		
(4-20 mA, 0-5 V, etc.)	P	4-20 mA = 0-100.00 display
	P1	Custom Scaling
Strain Gage, Potentiometer		
(4-wire ratio)	SG	0-200 mV = 0-100.00 display
	SG1	Custom Scaling

Note: The same DC signal conditioner board can be user configured for DC Volts, DC Amps, process, or strain.

Load Cells (6-wire ratio)	WM1	-99,999 to +99,999

Note: Excitation is 10V DC for up to four 350Ω load cells in parallel.

Ohms	R0	0-2.000 Ω, fixed range
	R1	0-20.000 Ω*
	R2	0-200.00 Ω*
	R3	0-2.0000 kΩ*
	R4	0-20.000 kΩ*
	R5	0-200.00 kΩ*
	R6	0-2.0000 MΩ, fixed range

* Input range user jumper selectable.
** Not ETL Listed.