

# Laurel Electronics

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## June 2018 Customer Price List

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**Laurel Electronics, Inc.**

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Effective 1 June 2018

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## Series

## Page

### LAUREATE DIGITAL PANEL METERS & COUNTERS

High accuracy, high read rate, digitally programmable meters available for a wide range of industrial signals. Modular design with field installable option boards and calibration stored in EEPROM. Choice of relay options, analog output options, and serial communication options.

<b>L1, L2, L3, L4</b> .....	Meters for DC, AC, voltage, current, process, strain gauge, load cell, TC, RTD, ohms.....	<b>3</b>
<b>L5, L6, L7, L8</b> .....	Counters for frequency, rate, total, time, batch, quadrature, draw, ratio, analog total .....	<b>4</b>
<b>L5, L6</b> .....	Serial input meter and remote display. Optional dual relays and analog output .....	<b>5</b>
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### LAUREATE DIN RAIL TRANSMITTERS

LT, LTE and LTS transmitters offer high accuracy, high update rate, and a wide choice of digitally programmable functions. Standard features include an isolated 4-20 mA or 0-10V analog output (user selectable), isolated serial data I/O (RS232, RS485, Ethernet) with Modbus or Custom ASCII protocol (user selectable), and dual 120 mA solid state relays (standard). Same signal conditioners and setup software as Laureate meters and counters.

<b>LT &amp; LTE 2 &amp; 4</b> .....	Transmitters, analog input, 4-20 mA and serial data outputs, dual relays.....	<b>6</b>
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<b>LTS6, LTSE6</b> .....	Serial data input, 4-20 mA analog output, dual relays (serial-to-analog converter) .....	<b>7</b>
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### LARGE DIGIT DISPLAYS

Available for serial, process, strain gauge, thermocouple, RTD, totalizer, frequency, rate, timer, and clock operation. Sealed to IP65 (NEMA4X).

<b>MAGNA</b> .....	Large Digit Displays, digit height of 2", 4", 6" or 8" .....	<b>8</b>
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### BAR GRAPH & SPECIALTY METERS

<b>L40</b> .....	Universal, low-cost analog input meter for 65 signal types and ranges .....	<b>7</b>
<b>LP9</b> .....	Loop-powered dual-line process meters with output options .....	<b>8</b>
<b>LP6</b> .....	Loop-powered dual-line process totalizers with output options .....	<b>8</b>
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### METER ACCESSORIES

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<b>CBL</b> .....	Computer interface cables for Laureate meters, counters and transmitters.....	<b>9</b>
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### HOW TO CONFIGURE MODEL NUMBERS

When building a Laureate model number, make one entry per bold heading. For example, Laureate model **L20010DCV1** is a 200 mV DC voltmeter with a universal AC power supply and an analog output. Laureate accessories are separated by commas. The above meter with a NEMA-4X enclosure would be **L20010DCV1, BOX1**. MAGNA large digit displays have ordering options separated by hyphens, as in **M44-MPR-MT2**.

**LAUREATE SERIES DPM**

L.....Laureate Series meter, plug-in screw terminal connectors.....\$230

**Display Color**

1.....Basic DPM with green LEDs.....NC  
 2.....Basic DPM with red LEDs.....NC  
 3.....Extended DPM, green LEDs.....\$30  
 4.....Extended DPM, red LEDs.....\$30

"Extended" adds customer curve linearization and rate from successive readings. Not applicable to temperature.

**Power**

0.....85-264 Vac or 95-300 Vdc.....NC  
 1.....12-34 Vac or 10-48 Vdc.....\$30

**Relay Output**

0.....None  
 1.....Two 8A Form C contact relays.....\$80  
 2.....Two 120 mA solid state relays.....\$55  
 3.....Four 8A Form A contact relays.....\$100  
 4.....Four 120 mA solid state relays.....\$75

**Analog Output**

0.....None  
 1.....4-20 mA, 0-10 V, -10 to +10V.....\$90

**Serial Communications**

0.....None  
 1.....RS232.....\$60  
 2.....RS485 with dual RJ11 connectors.....\$80  
 4.....RS485 with dual RJ45 connectors.....\$90  
 5.....USB.....\$60  
 6.....USB-to-RS485 converter.....\$100  
 7.....Ethernet.....\$120  
 8.....Ethernet-to-RS485 converter.....\$150

**Input Type****DC Volts (DC ranges are jumper selectable)**

DCV1.....± 200.00 mV.....NC  
 DCV2.....± 2.0000 V.....NC  
 DCV3.....± 20.000 V.....NC  
 DCV4.....± 200.00 V.....NC  
 DCV5.....± 600.0 V (range not ETL certified).....NC  
 DCV6.....± 300.0 V (range ETL certified).....NC

**DC Amperes (DC ranges are jumper selectable)**

DCA1.....± 2.0000 mA.....NC  
 DCA2.....± 20.000 mA.....NC  
 DCA3.....± 200.00 mA.....NC  
 DCA4.....± 5.000 A.....NC

**RMS Volts (AC RMS ranges are jumper selectable)**

RMV1.....200.00 mV.....\$40  
 RMV2.....2.0000 V.....\$40  
 RMV3.....20.000 V.....\$40  
 RMV4.....200.00 V.....\$40  
 RMV5.....600.0 V (range not ETL certified).....\$40  
 RMV6.....300.0 V (range ETL certified).....\$40

**RMS Amperes (AC RMS ranges are jumper selectable)**

RMA1.....2.0000 mA.....\$40  
 RMA2.....20.000 mA.....\$40  
 RMA3.....200.00 mA.....\$40  
 RMA4.....5.000 A.....\$40

**Process Signals (4-20 mA, 0-5V, etc.)**

P.....4-20 mA = 0-100.00 display.....NC  
 P1.....Custom scaling.....\$10

Specify minimum signal & displayed reading, maximum signal & displayed reading. 5, 10 or 24 Vdc excitation.

**Strain Gauges, Potentiometers (4-wire ratio)**

SG.....0 to 200 mV = 0 to 100.00 display.....NC  
 SG1.....Custom scaling.....\$10

Specify minimum signal & displayed reading, maximum signal & displayed reading. Full scale ranges from ± 200 mV to ± 600.0 V. 10 Vdc excitation.

**Load Cells (6-wire ratio)**

WM1.....-99,999 to +99,999.....\$60

Specify minimum signal & displayed reading, maximum signal & displayed reading. Full scale ranges from ± 200 mV to ± 500 mV. Includes 10 Vdc excitation.

**Thermocouple (TC ranges are user selectable)**

JC.....-210 to 760°C.....NC  
 JF.....-347 to 1400°F.....NC  
 KC.....-244 to 1372°C.....NC  
 KF.....-408 to 2501°F.....NC  
 TC.....-257 to 400°C.....NC  
 TF.....-430 to 752°F.....NC  
 EC.....-270 to 1000°C.....NC  
 EF.....-450 to 1830°F.....NC  
 NC.....-245 to 1300°C.....NC  
 NF.....-410 to 2370°F.....NC  
 RC.....-45 to 1768°C.....NC  
 RF.....-49 to 3213°F.....NC  
 SC.....-46 to 1768°C.....NC  
 SF.....-51 to 3214°F.....NC

**RTD Input (RTD ranges are user selectable)**

P385C.....Pt 100 Ω platinum, -202 to 850°C.....NC  
 P385F.....Pt 100 Ω platinum, -331 to 1562°F.....NC  
 P392C.....Pt 100 Ω platinum, -202 to 631°C.....NC  
 P392F.....Pt 100 Ω platinum, -331 to 1168°F.....NC  
 N672C.....Ni 120 Ω nickel, -100°C to +260°C.....NC  
 N672F.....Ni 120 Ω nickel, -148°F to +500°F.....NC  
 C427C.....Cu 10 Ω copper, -100°C to +260°C.....NC  
 C427F.....Cu 10 Ω copper, -148°F to +500°F.....NC

**Ohms Input (\* jumper selectable ohms range)**

R0.....0-2.0000 ohm (special fixed range).....\$25  
 R1.....0-20.000 ohm \*.....NC  
 R2.....0-200.00 ohm \*.....NC  
 R3.....0-2.0000 kohm \*.....NC  
 R4.....0-20.000 kohm \*.....NC  
 R5.....0-200.00 kohm \*.....NC  
 R6.....0-2.0000 Mohm (special fixed range).....\$25

**Options & Accessories. Please see page 9.**

**LAUREATE COUNTER / TIMER**

L.....Laureate Series multifunction counter / timer / rate meter with dual-channel pulse, process or quadrature input .....\$240

**Display Color**

5.....Basic meter, green LEDs.....NC  
 6.....Basic meter, red LEDs.....NC  
 7.....Extended meter, green LEDs .....\$30  
 8.....Extended meter, red LEDs .....\$30

Please see Input Types below for meaning of "Extended."

**Power**

0.....85-264 Vac or 95-300 Vdc.....NC  
 1.....12-34 Vac or 10-48 Vdc.....\$30

**Relay Output**

0.....None.....NC  
 1.....Two 8A Form C contact relays .....\$80  
 2.....Two 120 mA solid state relays.....\$55  
 3.....Four 8A Form A contact relays.....\$100  
 4.....Four 120 mA solid state relays .....\$75

**Analog Output**

0.....None.....NC  
 1.....Single isolated analog output .....\$90  
 2.....Dual isolated analog outputs .....\$135

**Serial Communications**

0.....None  
 1.....RS232 .....\$60  
 2.....RS485 with dual RJ11 connectors .....\$80  
 4.....RS485 with dual RJ45 connectors .....\$90  
 5.....USB .....\$60  
 6.....USB-to-RS485 converter.....\$100  
 7.....Ethernet.....\$120  
 8.....Ethernet-to-RS485 converter.....\$150

**Input Type**

**Dual Channel Pulse or AC Inputs**

FR.....Scalable to 999,999.....NC

**Basic counter**

Frequency (2 channels simultaneously), rate (2 channels simultaneously), total (up or down, 2 channels simultaneously), period (2 channels simultaneously), stopwatch, time interval, square root of rate.

**Extended counter**

Above plus rate and total simultaneously, linearized inputs using up to 180 points, arithmetic functions (A\*B, A/B, A+B, A-B, A/B-1), phase angle, duty cycle, up/down counting, batch control.

**Process Rate & Total**

VF1.....4-20 mA.....NC  
 VF2.....0-1 mA.....NC  
 VF3.....0-10 V.....NC  
 VF4.....Custom Scaling ..... Consult factory

**Basic counter**

Rate, square root of rate (differential pressure or target type flow meters), rate.and total.

**Extended counter**

Above plus linearized inputs using up to 180 points, batch control with rate, total and # of batches or grand total of all batches, time measurements based on rate.

**Quadrature**

QD.....scalable to 999,999 .....\$30

**Basic counter**

Position or length from encoders. Accepts differential or single-ended inputs. 1x, 2x or 4x plus zero index.

**Extended counter**

Above plus bidirectional rate. Rate and position or length are not simultaneous.

**Options & Accessories.** Please see page 9.

**SERIAL INPUT METER / REMOTE DISPLAY**

L ..... Laureate counter ..... \$180

**Display Color**5 ..... Remote display with green LEDs ..... NC  
6 ..... Remote display with red LEDs ..... NC**Power**0 ..... 85-264 Vac or 90-300 Vdc ..... NC  
1 ..... 12-32 Vac or 10-48 Vdc ..... \$30**Relay Output**0 ..... None ..... NC  
1 ..... Two 8A Form C contact relays ..... \$80  
2 ..... Two 120 mA solid state relays ..... \$55  
3 ..... Four 8A Form A contact relays ..... \$100  
4 ..... Four 120 mA solid state relays ..... \$75**Analog Output**0 ..... None ..... NC  
1 ..... Single isolated analog output ..... \$90  
2 ..... Dual isolated analog outputs ..... \$135**Serial Communications**1 ..... RS232 ..... \$60  
2 ..... RS485 with dual RJ11 connectors ..... \$80  
4 ..... RS485 with dual RJ45 connectors ..... \$90  
5 ..... USB ..... \$60  
6 ..... USB to RS485 converter ..... \$100  
7 ..... Ethernet ..... \$120  
8 ..... Ethernet-to-RS485 converter ..... \$150**Options & Accessories.** Please see page 9.**LAUREATE SCALE / WEIGHING METER**

LW ..... Laureate scale / weighing meter, plug-in screw terminal connectors ..... \$260

**Display Color**1 ..... Basic meter with green LEDs ..... NC  
2 ..... Basic meter with red LEDs ..... NC**Power**0 ..... 85-264 Vac or 95-300 Vdc ..... NC  
1 ..... 12-32 Vac or 10-48 Vdc ..... \$30**Relay Output**0 ..... None  
1 ..... Two 8A Form C contact relays ..... \$80  
2 ..... Two 120 mA solid state relays ..... \$55  
3 ..... Four 8A Form A contact relays ..... \$100  
4 ..... Four 120 mA solid state relays ..... \$75**Analog Output**0 ..... None  
1 ..... 4-20 mA, 0-20 mA, 0-10V ..... \$90**Serial Communications**0 ..... None  
1 ..... RS232 ..... \$60  
2 ..... RS485 with dual RJ11 connectors ..... \$80  
4 ..... RS485 with dual RJ45 connectors ..... \$90  
5 ..... USB ..... \$60  
6 ..... USB-to-RS485 converter ..... \$100  
7 ..... Ethernet ..... \$120  
8 ..... Ethernet-to-RS485 converter ..... \$150**Input Type****DC Volts** (DC, P & SG ranges are jumper selectable)DCV1 ..... ± 200.00 mV ..... NC  
DCV2 ..... ± 2.0000 V ..... NC  
DCV3 ..... ± 20.000 V ..... NC**Process Signals** (4-20mA, 0-5V, etc.)P ..... 4-20 mA = 0-100.00 display ..... NC  
P1 ..... Custom scaling ..... \$10

Specify min signal &amp; displayed reading, max signal &amp; displayed reading. Includes 5, 10 or 24 Vdc excitation.

**Strain Gauges, Potentiometers** (4-wire ratio)SG ..... 0-200.00 mV = 0-100.00 display ..... NC  
SG1 ..... Custom scaling ..... \$10

Specify min signal &amp; reading, max signal &amp; reading. Full scale ranges ±200 mV to ±20V. Includes 10Vdc excitation

**Load Cells** (6-wire ratio)

WM1 ..... -99,999 to +99,999 ..... \$60

Includes custom scaling. Specify min signal &amp; reading, max signal &amp; reading. Full scale ranges ±20 mV to ±500 mV. Includes 10 Vdc excitation.

**Add-on Options & Accessories.** Please see page 9.

## LAUREATE TRANSMITTERS, ANALOG INPUT

Includes isolated 4-20 mA or 0-10V analog output, isolated serial data output (Modbus or Laurel protocol), isolated dual 120 mA solid state relays, isolated 5, 10 or 24 Vdc excitation output (for DC, AC, process, strain gauge, load cell inputs), and detachable screw clamp connectors.

LT ..... 4-20 mA & RS232/RS485 outputs ..... \$235  
LTE ..... 4-20 mA & Ethernet outputs ..... \$320

### Main Board

2 ..... Standard analog input ..... NC  
4 ..... Extended analog input ..... \$40

"Extended" adds custom curve linearization and rate from successive readings. Not applicable to temperature.

### Power

0 ..... 85-264 Vac or 95-300 Vdc ..... NC  
1 ..... 12-32 Vac or 10-48 Vdc ..... \$30

### Input Type

#### DC Volts (DC ranges are jumper selectable)

DCV1 ..... ± 200.00 mV ..... NC  
DCV2 ..... ± 2.0000 V ..... NC  
DCV3 ..... ± 20.000 V ..... NC  
DCV4 ..... ± 200.00 V ..... NC  
DCV5 ..... ± 600.0 V (range not ETL certified) ..... NC  
DCV6 ..... ± 300.0 V (range ETL certified) ..... NC

#### DC Amperes (DC ranges are jumper selectable)

DCA1 ..... ± 2.0000 mA ..... NC  
DCA2 ..... ± 20.000 mA ..... NC  
DCA3 ..... ± 200.00 mA ..... NC  
DCA4 ..... ± 5.000 A ..... NC

#### RMS Volts (AC RMS ranges are jumper selectable)

RMV1 ..... 200.00 mV ..... \$40  
RMV2 ..... 2.0000 V ..... \$40  
RMV3 ..... 20.000 V ..... \$40  
RMV4 ..... 200.00 V ..... \$40  
RMV5 ..... 600.0 V (range not ETL certified) ..... \$40  
RMV6 ..... 300.0 V (range ETL certified) ..... \$40

#### RMS Amperes (AC RMS ranges are jumper selectable)

RMA1 ..... 2.0000 mA ..... \$40  
RMA2 ..... 20.000 mA ..... \$40  
RMA3 ..... 200.00 mA ..... \$40  
RMA4 ..... 5.000 A ..... \$40

#### Process Signals (4-20 mA, 0-5V, etc.)

P ..... 4-20 mA in = 4-20 mA out ..... NC  
P1 ..... Custom scaling ..... \$10

Specify min input & output, max input & output.

#### Strain Gauges, Potentiometers (4-wire ratio)

SG ..... 0-200 mV in = 4-20 mA out ..... NC  
SG1 ..... Custom scaling ..... \$10

Specify min input signal & min output, max input signal & max output. Set for 10 Vdc excitation.

### Load Cells (6-wire ratio)

WM1 ..... Load cell custom scaling ..... \$60

Specify min input & output, max input & output. Full scale ranges from ±20 mV to ±500 mV. Excitation set to 10 Vdc.

### Thermocouple (TC ranges are use selectable)

JC ..... -210 to 760°C ..... NC  
JF ..... -347 to 1400°F ..... NC  
KC ..... -244 to 1372°C ..... NC  
KF ..... -408 to 2501°F ..... NC  
NC ..... -245 to 1300°C ..... NC  
NF ..... -410 to 2370°F ..... NC  
TC ..... -257 to 400°C ..... NC  
TF ..... -430 to 752°F ..... NC  
EC ..... -270 to 1000°C ..... NC  
EF ..... -450 to 1830°F ..... NC  
RC ..... -45 to 1768°C ..... NC  
RF ..... -49 to 3213°F ..... NC  
SC ..... -46 to 1768°C ..... NC  
SF ..... -51 to 3214°F ..... NC

### RTD Input (RTD ranges are user selectable)

P385C ..... Pt 100 Ω platinum, -202 to 850°C ..... NC  
P385F ..... Pt 100 Ω platinum, -331 to 1562°F ..... NC  
P392C ..... Pt 100 Ω platinum, -202 to 631°C ..... NC  
P392F ..... Pt 100 Ω platinum, -331 to 1168°F ..... NC  
N672C ..... Ni 120 Ω nickel, -100°C to +260°C ..... NC  
N672F ..... Ni 120 Ω nickel, -148°F to +500°F ..... NC  
C427C ..... Cu 10 Ω copper, -100°C to +260°C ..... NC  
C427F ..... Cu 10 Ω copper, -148°F to +500°F ..... NC

### Ohms Input (\* jumper selectable ohms range)

R0 ..... 0-2.0000 ohm (special fixed range) ..... \$25  
R1 ..... 0-20.000 ohm \* ..... NC  
R2 ..... 0-200.00 ohm \* ..... NC  
R3 ..... 0-2.0000 kohm \* ..... NC  
R4 ..... 0-20.000 kohm \* ..... NC  
R5 ..... 0-200.00 kohm \* ..... NC  
R6 ..... 0-2.0000 Mohm (special fixed range) ..... \$25

### Accessory Cables

CBL04 ..... RS232 cable. Connects RS232 port of PC to RS232 port of LTS transmitter ..... \$19

CBL02 ..... USB-to-DB9 adapter cable. Includes FTDI chip for compatibility with all versions of Windows. Combination of CBL02 and CBL04 connects PC USB port to LT RS232 port. .... \$39

## LAUREATE TRANSMITTERS, PULSE INPUT

Includes isolated 4-20 mA or 0-10V analog output, isolated serial data output (Modbus or Laurel protocol), isolated dual 120 mA solid state relays, isolated 5, 10 or 24 Vdc excitation output, and detachable screw clamp connectors.

LT..... 4-20 mA & RS232/RS485 .....\$235  
LTE..... 4-20 mA & Ethernet .....\$320

### Main Board

6..... Standard pulse input .....NC  
8..... Extended (see notes below).....\$40

### Power

0..... 85-264 Vac or 95-300 Vdc.....NC  
1..... 12-34 Vac or 10-48 Vdc.....\$30

### Input Type

#### Dual Channel Pulse or AC Inputs

FR..... Dual pulse or AC inputs.....NC

#### With standard main board

Frequency (2 channels simultaneously), rate (2 channels simultaneously), total (up or down, 2 channels simultaneously), period (2 channels simultaneously), stopwatch, time interval, square root of rate.

#### With Extended main board

Above plus rate and total simultaneously, linearized inputs using up to 180 points, ratio, draw, arithmetic functions (A\*B, A/B, A+B, A-B), phase angle, duty cycle, up/down counting, batch control.

### Process Input with Totalizing

VF1..... 4-20 mA.....NC  
VF2..... 0-1 mA.....NC  
VF3..... 0-10 V.....NC  
VF4..... Custom Scaling ..... Consult factory

#### With standard main board

Rate, rate & total simultaneously (analog totalizer), square root of rate (for differential pressure flow meters).

#### With Extended main board

Above plus linearized inputs using up to 180 points, batch control with rate, total and # of batches or grand total of all batches, time measurements based on rate.

### Quadrature

QD..... Quadrature inputs.....\$30

#### With standard main board

Position or length from encoders. Accepts differential or single-ended inputs: 1x, 2x or 4x, plus zero index.

#### With Extended main board

Above plus bidirectional rate (rate and position or length are not simultaneous).

### Accessory Cables

CBL04..... RS232 cable. Connects RS232 port of PC to RS232 port of LTS transmitter.....\$19  
CBL02..... USB-to-DB9 adapter cable. Includes FTDI chip for compatibility with all versions of Windows. Combination of CBL02 and CBL04 connects PC USB port to LT RS232 port.....\$39

## LAUREATE TRANSMITTER, SERIAL DATA INPUT

Serial-to-analog converter. Converts a serial data input (Modbus or Custom ASCII protocol) to an isolated 4-20 mA or 0-10V analog output. Includes dual 120 mA solid state relays and detachable screw clamp connectors.

LTS6..... RS232 or RS485 in, 4-20 mA out.....\$200  
LTSE6..... Ethernet in, 4-20 mA out.....\$260

### Power

0..... 85-264 Vac or 95 to 300 Vdc.....NC  
1..... 12-32 Vac or 10-48V dc.....\$30

### Accessory Cables

CBL04..... RS232 cable. Connects RS232 port of PC to RS232 port of LTS transmitter.....\$19  
CBL02..... USB-to-DB9 adapter cable. Includes FTDI chip for compatibility with all versions of Windows. Combination of CBL02 and CBL04 connects PC USB port to LT RS232 port. ....\$39

## L40 Universal, Low-Cost Analog Input Meter

Build a model number with items separated by hyphens. Ordered items are shipped installed in display. Example: L40- FS-A1 (Type K thermocouple, 1°C resolution)

### Base Meter

L40..... Digital meter for 65 user-selectable analog signal types and ranges: DC voltage or current, AC RMS voltage or current, process signals (4-20 mA, 0-10V), thermocouple (10 types, °C or °F), RTD (6 types, °C or °F), thermistors (NTC or PTC), resistance (0-10k or 0-100k ohms), and potentiometer inputs.....\$130

### Custom Setup by Laurel or Distributor

FS..... Jumper setting and front panel programming. Specify signal type and range. For DC, AC, process and resistance signal which require scaling, specify min input, min reading, max input, max reading. For temperature, specify 1° or 0.1° resolution and °C or °F. For NTC thermistors, specify R25 and beta.....\$20

### Slot 1 Option Board (Optional, select one or none. Shipped installed in meter.)

A1..... Single 8A relay for Slot 1.....\$30  
M1..... Isolated, scalable 4-20 mA output.....\$50  
S1..... Isolated RS485 output, Modbus RTU.....\$50

### Slot 2 Option Board (Optional, select one or none. Requires Slot 1 option board. Shipped installed in meter.)

A2..... Single 8A relay for Slot 2.....\$30

### Add-on Options & Accessories. Same mechanical options as for Laureates. Please see page 9.

## MAGNA SERIES LARGE DIGIT DISPLAYS

Build a model number with items separated by hyphens. Ordered items are shipped installed in display. Example: M24-MPR-MT2. MAGNA orders are non-cancelable, non-returnable.

### Base Display with Black NEMA-4 Case

<b>M24</b> .....	2" (57 mm), 4 digits. Display 8.8.8.8.	.....	\$480
<b>M24UM</b> ...	2" (57 mm), 4 digits. Display 8.8.8.8.	.....	\$540
	Provides extra case width for relay, analog or serial output options.		
<b>M26</b> .....	2" (57 mm), 6 digits. Display 8.8.8.8.8.8.	.....	\$630
<b>M44</b> .....	4" (102 mm), 4 digits. Display 8.8.8.8.	.....	\$780
<b>M46</b> .....	4" (102 mm), 6 digits. Display 8.8.8.8.8.8.	.....	\$1030
<b>M64</b> .....	6" (150 mm), 4 digits. Display 8.8.8.8.	.....	\$1390
<b>M66</b> .....	6" (150 mm), 6 digits. Display 8.8.8.8.8.8.	.....	\$1410
<b>M84</b> .....	8" (200 mm), 4 digits. Display 8.8.8.8.	.....	\$1700
<b>M86</b> .....	8" (200 mm), 6 digits. Display 8.8.8.8.8.8.	.....	\$1740

### Signal Input (one required, select one)

<b>MCR</b> .....	Counter / rate meter.	.....	\$110
<b>MCT</b> .....	Clock / timer with " . "decimal separators	.....	\$100
<b>MCT2</b> .....	Clock / timer with " : "colon separators	.....	\$150
<b>MLC</b> .....	Load cell	.....	\$120
<b>MPR</b> .....	Process (4-20 mA, 0-10V)	.....	\$100
<b>M232</b> .....	RS232 serial input	.....	\$80
<b>M485</b> .....	RS485 / RS422 serial input	.....	\$110
<b>MRTD</b> .....	RTD input	.....	\$340
<b>MTC</b> .....	Thermocouple input	.....	\$340

MRTD and MCT use a process display plus a Laurel LT RTD or thermocouple 4-20 mA transmitter (page 6). Specify the sensor type, range to be displayed in °C or °F, and internal or external transmitter mounting.

### Analog Output (optional, select one or none)

<b>MAO1</b> .....	4-20 mA	.....	\$80
<b>MAO2</b> .....	0-10V	.....	\$80
<b>MAO3</b> .....	-10V to +10V	.....	\$140

### Relay Output (optional, select one or none)

<b>MRL1</b> .....	Two 5A, 250 Vac relays.	.....	\$70
<b>MRL2</b> .....	Four 5A, 250 Vac relays	.....	\$90

### Serial Data Output (optional, select one or none)

<b>MO232</b> .....	RS232	.....	\$80
<b>MO485</b> .....	RS485 with Modbus ASCII	.....	\$110

### Case and Mounting (one required, select one)

<b>MT1</b> .....	Panel mount, black NEMA4 (IP65) case	.....	\$190
<b>MT2</b> .....	Wall mount, black NEMA4 (IP65) case	.....	\$100
<b>MT3</b> .....	Suspension mount, black NEMA4 case	.....	\$100

### Modifying Options (not shippable separately)

<b>MRDLV</b> ..	Daylight viewing brightness	.....	\$150
<b>MHTR</b> .....	AC heater for operation to -25°C (-13°F)	.....	\$360
<b>MPS2</b> .....	11-30 Vdc power instead of 85-265 Vac	.....	\$100

### Add-on Option

<b>MRP</b> .....	MAGNA wired remote programmer	.....	\$150
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## LP LOOP POWERED DIGITAL PANEL METERS

### LP91 LOOP POWERED PROCESS METER

<b>LP91</b> ...	2-line display, no bargraph	.....	\$194
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#### Outputs

<b>0</b> .....	2 NPN open collectors (standard)	.....	\$0
<b>1</b> .....	2 NPN + 2 solid state relays	.....	\$80
<b>2</b> .....	2 NPN + 4-20 mA analog output	.....	\$80
<b>3</b> .....	2 NPN + 2 relays + analog output	.....	\$135

### LP92 LOOP POWERED PROCESS METER

<b>LP92</b> ...	2-line display with bargraph	.....	\$229
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#### Outputs

<b>0</b> .....	2 NPN open collectors (standard)	.....	\$0
<b>1</b> .....	2 NPN + 2 solid state relays	.....	\$70
<b>2</b> .....	2 NPN + 4-20 mA analog output	.....	\$70
<b>3</b> .....	2 NPN + 2 relays + analog output	.....	\$125

### LP61 LOOP POWERED TOTALIZING PROCESS METER

<b>LP61</b> ...	2-line totalizing process meter	.....	\$269
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#### Outputs and bargraph

<b>0</b> .....	2 NPN open collectors (standard)	.....	\$0
<b>1</b> .....	2 NPN + 2 solid state relays	.....	\$80
<b>2</b> .....	2 NPN + 4-20 mA analog output	.....	\$80
<b>3</b> .....	2 NPN + 2 relays + analog output	.....	\$135

#### Models with added bargraph:

<b>4</b> .....	2 NPN open collectors (standard)	.....	\$35
<b>5</b> .....	2 NPN + 2 solid state relays	.....	\$105
<b>6</b> .....	2 NPN + 4-20 mA analog output	.....	\$105
<b>4</b> .....	2 NPN + 2 relays + analog output	.....	\$160



## ACCESSORIES FOR METERS & COUNTERS

### LAUREATE LENS OPTIONS

NL .....	Button pads, no Laurel logo.....	\$5
BL .....	No button pads, no Laurel logo .....	\$5

### PROTECTION & CASES FOR 1/8 DIN METERS

IPC .....	Front panel cover, seals front of meter case to NEMA 4X .....	\$40
BOX1 .....	Wall mount polycarbonate enclosure sealed to NEMA 4X .....	\$140
BOX2 .....	Wall mount polycarbonate enclosure sealed to NEMA 4X, plus IPC cover .....	\$180
CASE1 .....	Benchtop laboratory case for one 1/8 DIN meter.....	\$115
CASE2 .....	Benchtop laboratory case for two 1/8 DIN meters .....	\$115

### LAUREATE SERIAL CABLES

CBL01 .....	RJ11-to-DB9 cable. Connects RS232 port of PC to RS232 port of meter .....	\$19
CBL02 .....	USB-to-DB9 adapter cable. The combination of CBL01 and CBL02 connects USB port of PC to RS232 port of meter .....	\$39
CBL03-1 .....	6-wire data cable, 1 ft, with RJ11 connectors. Daisy chains meters via RS485.....	\$8
CBL03-7 .....	6-wire data cable, 7 ft, with RJ11 connectors. Daisy chains meters via RS485.....	\$8
CBL04 .....	RS232 cable. Connects RS232 port of PC to RS232 port of LT transmitter .....	\$19
CBL05 .....	USB cable, A-B. Connects USB port of PC to USB port of meter.....	\$15
CBL06 .....	USB-to-RS485 adapter cable for meters. Connects USB port of PC to meter with RS485 option with dual RJ11 jack.....	\$39

## QLS QUADRUPLE OUTPUT LOOP SPLITTER

Splits one 4-20 mA, 1-5V, 0-5V or 0-10V input into four 4-20 mA loops with a common ground or different grounds.

QLS-1 .....	Loop splitter, 85-264 Vac power.....	\$200
QLS-2 .....	Loop splitter, 10-48 Vdc power.....	\$230

## M35 MICROMINATURE METER

M35 .....	3.5 digit micro-miniature meter in a 1.9" x 0.95" (48 x 24 mm) case. Process input (4-20 mA, etc), isolated 10-30 Vdc power.....	\$150
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