

Available in three case styles

# Premo BarGraph Meters

for Monitoring and Control

- 6 digit, alpha-numeric LED display
- 101 segment bargraph in red, green or tricolor
- Rugged ANSI switchboard cases
- RS-232, RS-485, USB & Ethernet interface options

## Direct Measurement of

DC Current & Voltage  
AC Current & Voltage  
Process Loops  
Frequency / Counts  
Speed Pickups / RPM  
Quadrature  
Power (DC & Single Phase)

Thermocouples  
RTDs  
Load Cells / Strain Gauges  
LVDTs  
Pressure  
Resistance / Potentiometers  
pH / ORP



Style C

A deluxe bargraph indicator with enhanced control capabilities. Flexible and highly configurable for display of electrical signals and process parameters. Combines the precision of a digital readout with a vivid proportional display. Includes numerous computation functions, SCADA options and an extensive input module selection.

## Features

- Single & multiple channel inputs
- Adjustable bargraph span & zero position
- Bar & digital display can be set to different channels
- Datalogging and PID control functions
- Cross channel math capability
- Six smart setpoints with 8 selectable functions
- Front panel setpoint status indicators
- Up to 6 relay outputs for control and alarms
- Single or dual analog retransmit option
- Wide power supply range (AC & DC)
- 8 level brightness control from the front panel
- Sensor excitation to power 4-20mA transmitters, bridge type sensors or other transducers
- Programmable input filter and display resolution
- Digital communications and PC setup software

The Premo BarGraph line is based on a high resolution A/D converter and 32 bit CPU with floating point math capability. This high performance measurement and computation platform provides unique capabilities in a switchboard instrument. In addition to displaying and retransmitting a single channel signal, the Premo meter can display two channels, perform cross channel math, log data and control processes.

## Setpoint Control

Up to six setpoints can be configured for control and alarm functions. Each relay may be programmed to activate above or below a setpoint, operate with hysteresis or delay, latch, track another setpoint, perform one shot, pulse and repeat timer functions or On/Off control. For processes with overshoot or undershoot, the PID mode on SP1 & SP2 provides stable control.

## Datalogging

Premo BarGraph Meters will log data in either linear (writes until full) or cyclic (overwrites oldest data) FIFO modes. A

reading can be triggered from the program button, a digital input, time or an alarm condition. Optional memory allows storage of up to 4000 readings in non-volatile EEPROM. The optional real time clock can be used to initiate readings and time stamp the data. A lithium battery provides clock back-up in the event of power loss. The clock will also activate a setpoint or control function at a preset time.

## Display

The bar can display 1 of 4 inputs or 1 of 2 totalizers. It can be setup for min/max mode, linear/log scaling, offset zero, center zero, suppressed zero and/or peak/valley display. The source for the six digit readout is independently selected. Decimal position & display brightness are set from the front panel.



Rear view: rugged steel case and modular plug connections



**WESCHLER  
INSTRUMENTS**

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# Premo Edgewise BarGraphs



Style D

## Style G Faceplate

Legend:

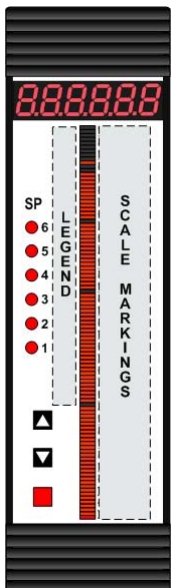
0.25"x2.7" (6x73mm) max.

Bar Scale:

0.6"x4.1" (14x104mm) max.

Bar Graduations:

Specify linear, logarithmic or custom & number of sub divisions.



Style G

All the features of the Premo family in two edgewise case sizes:

6" Edgewise Switchboard  
12" Large Edgewise

- 6 digit, alpha-numeric LED display
- Bright 101 segment tricolor bar
- Enhanced table calibration for tank level, square law & other non-linear measurements
- Optional SD memory card for long term data logging
- 6" case fits standard ANSI panel cutout
- 12" case fits Bailey draft gauge panel cutout

## Connections

### Input Signals

Varies by module (S1-S16)

Typical DCV & mA:

S1	+
S2	24V Excitation
S3	-

### Functions

F1	Program Lock
F2	Reading Hold
F3	Display Test
F4	Common
F5	Capture

### Power

P1	AC Neutral or DC -
P2	AC Line or DC +

### Relay Outputs

	4 Form A or SS	6 Form A	Form C & Form A	5V/ TTL or Open Coll.
R1	SP4 Com	SP4-6 Com	SP2 NO	Com
R2	SP4 NO	SP6 NO	SP2 NC	5V or Ext V+
R3	SP3 Com	SP5 NO	SP2 & 4 Com	SP6
R4	SP3 NO	SP4 NO	SP4 NO	SP5
R5	SP2 Com	SP1-3 Com	SP1 NO	SP4
R6	SP2 NO	SP3 NO	SP1 NC	SP3
R7	SP1 Com	SP2 NO	SP1 & 3 Com	SP2
R8	SP1 NO	SP1 NO	SP3 NO	SP1

### Analog Retransmit

A1	Output -	} Single channel
A2	Output +	

A1	Output 2 +	} Dual channel
A2	Output 1 & 2 -	
A3	Output 1 +	

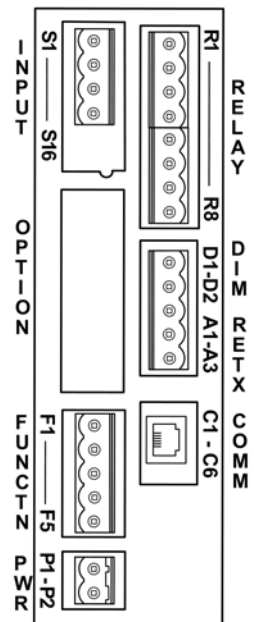
### Serial Communications

	RS-232	RS-485
C1	--	--
C2	Com	Com
C3	+5VDC	+5VDC
C4	TXD	A (high)
C5	RXD	B (low)
C6	--	--

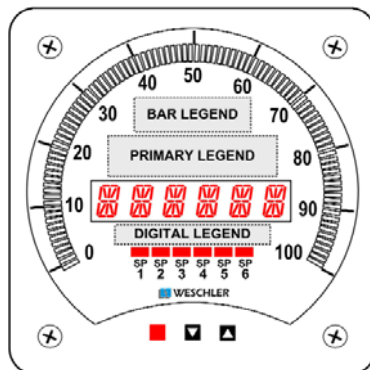
### Dimming

D1	Dim +
D2	Common

## Style D & G



## Style C Faceplate



Black on white standard, white on black available on request,

Primary Legend:

0.5"x2.0" (13x51mm) max.

Bar Legend (optional):

0.4"x1.4" (10x36mm) max.

Digital Legend (optional):

0.23"x1.9" (6x48mm) max.

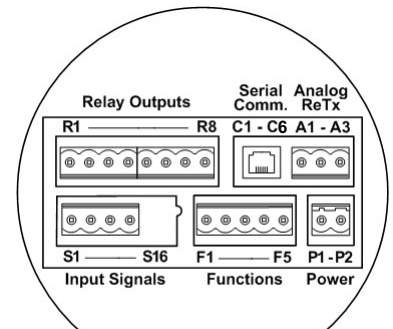
Bar Scale:

2 digit markings standard; longer markings may require smaller legends.

Bar Graduations:

Specify linear, logarithmic or custom & number of sub divisions.

## Style C



Mating connectors supplied (except serial communications).

# Premo BarGraph Meters

## Display Examples



Traditional Red Bar with 6 setpoints active. Setpoints above the signal level are indicated by on segments; setpoints below show as off segments. Bar and digital display are both set to 100A full scale. Digital display shows 5 digit resolution with a fixed alpha sixth character.

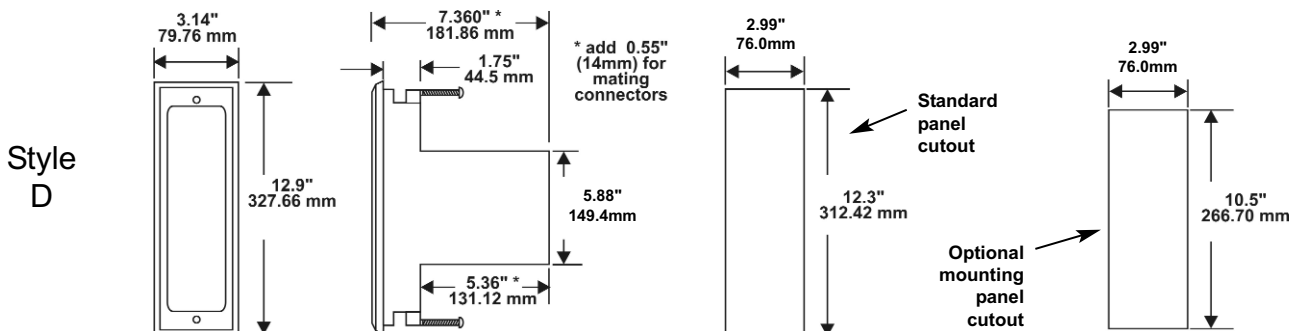
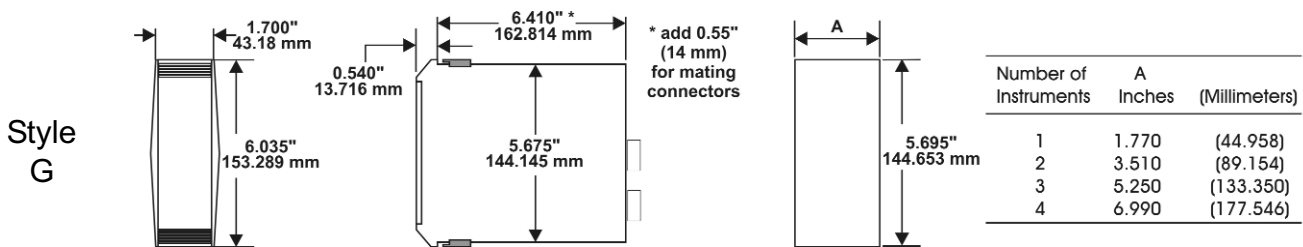
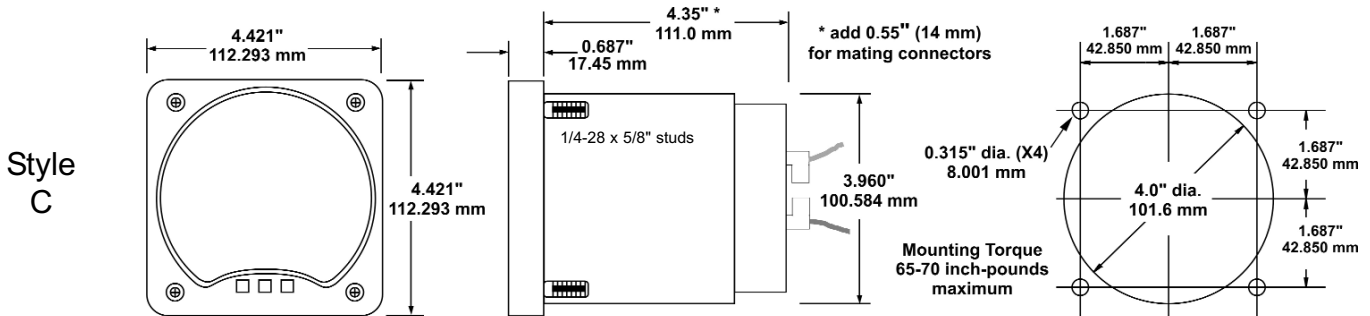


Tricolor Bar in Normal Mode with 6 setpoints active. Entire bar changes to the selected color when the signal passes a setpoint. Bar scale is percent of the 2A full scale input. Digital display reads 2A full scale with 4.5 digit resolution.



Tricolor Bar in Banded Mode. Only bar segments between the setpoints show in the assigned color. The bar is scaled to show the input from 0 to 100A. Using a 24bit DC input module, the digital display shows the input up to 300A, with 1mA resolution.

## Case Dimensions





# for Monitoring and Control

## Specifications

Input Accuracy:	Varies by function & module	Analog Output:	Isolated 16 bit, user scalable & reversible
DCV (24 bit)	±(0.01% of reading + 2 counts)	mA out	4-20mA, 500Ω maximum loop resistance
DCV, DCA	±(0.03% of reading + 2 counts)	Volts out	0-10VDC, 500Ω minimum load resistance
ACV, ACA	±(0.07% of reading + 5 counts)	Dual out	Two 0-10VDC outputs, shared low
Temperature	±(0.05% of reading + 3 counts)	Accuracy:	0.02% FS with 0.4μA or 250μV resolution
Direct Pressure	±(1.0% of range + 3 counts)	Update Rate:	7/second typical
Frequency/RPM	±(0.01% of reading + 2 counts)	Communications:	Isolated RS-232, 2-wire RS-485 (half duplex) or 10/100Base-T Ethernet
Strain/Load (24 bit)	±(0.02% of reading + 3 counts)	Protocol:	ASCII, Modbus RTU or Modbus TCP/IP
Process	±(0.03% of reading + 2 counts)	Power Supply:	85-265 VAC / 95-370 VDC; 18-48 VAC / 10-72 VDC; 6W, 12VA max. on Style C & G; 10W, 20VA max. on Style D
Resistance/Pots	±(0.05% of reading + 2 counts)	Sensor Excitation:	Available on some input modules. 24VDC @50mA (2-wire loop power) 5 or 10VDC @120mA (bridge excitation)
Input Characteristics:		Operating Temperature:	0 to 55°C
DCmV, DCV	>500kΩ input resistance	Humidity:	<95% RH@40°C (non-condensing)
ACmV, ACV	≥1MΩ input resistance	Storage Temperature:	-20°C to 70°C
DCmA, ACmA	2V burden at full scale	Warm-up time:	10 minutes
DCA, ACA	<130mV burden at full scale	EMI:	EN61000-3/4/6 and EN61010-1
Line frequency	4MΩ input resistance	Isolation (50/60Hz):	2500VAC 500VAC 50VAC
Bargraph Display:	101 segment red, green or tricolor LED	Connectors:	Plug-in, screw terminal mating connectors included, accept #14-24 AWG wire; fixed screw terminals on 1A & 5A inputs; 2.5mm tubing to direct pressure modules, specialty connectors on some modules. RJ-6 on RS-232 & RS-485; RJ-45 on Ethernet Two years, material and workmanship
Digital Display:	6 digit alpha-numeric LED Range -199999 to 999999 counts	Warranty:	<b>Style C Mechanical:</b> Bar: 7.25" length, 235° arc, ±60° viewing angle Digits: 0.43" (10.9mm) height Case: Steel housing, molded front & rear bezels. Remove rear bezel to change input or relay options. Mounting: Fits standard ANSI 4" switchboard cutout Weight: 22 ounces (0.7kg)
Decimal Point:	5 positions or off, front panel selectable		<b>Style G Mechanical:</b> Bar: 10" length, ±60° viewing angle Digits: 0.31" (7.9mm) height Case: Steel housing, molded rear bezel. Remove rear bezel to change input or relay options. Mounting: Fits standard ANSI 6" switchboard cutout Weight: 16 ounces (0.5kg)
Positive Overrange:	Bar: entire bar flashes Digital: flashing OVER		<b>Style D Mechanical:</b> Bar: 4" length, ±60° viewing angle Digits: 0.43" (10.9mm) height Case: Steel housing, metal front, molded rear bezel Mounting: Fits Bailey draft gauge cutout Weight: 31 ounces (0.9kg)
Negative Overrange:	Bar: first segment flashes Digital: flashing UNDER		
Annunciators:	Six red LEDs, 1 per setpoint		
Text:	Last digit may be set to a fixed alpha-numeric character.		
Display Dimming:	8 levels, front panel selectable, Rear panel continuous dimming optional		
A/D Converter:	Dual slope, bipolar 17 bit, 2V full scale		
Conversion Rate:	3-10/second (varies by function)		
Auxiliary A/D:	16 or 24 bit converter on some input modules		
Data Memory:	Optional 1M EEPROM stores 4000 readings		
Macro Memory:	4k flash standard		
Real Time Clock:	Year:Month:Date:Hour:Minute:Second (optional) 15 year lithium battery backup		
Counter Functions:	Two built-in Up/Down counters		
Data Logging:	Logging with time stamp to optional memory. Trigger on time interval, setpoint, manual Tare, compensation and calibration		
Offset Functions:			
Math Functions:	Sum, difference, ratio or product of two inputs		
Linearization:	4 selectable 32 point tables, cascadable		
Signal Processing:	Average, smart filter, rounding, square root		
Timer:	Time up, time down or real time clock modes		
Totalizer:	Two, for total or batch total		
Peak and Valley:	Min/Max storage with front panel recall		
Setpoint Functions:	Hysteresis, on/off delays, one shot, pulse and repeat timers, latching, dual PID, setpoint tracking, resetting of registers, initiating of logging and printing		
Setup:	Front panel menu or PC configuration software		
Relay Output:	Up to 6 mechanical or solid state control outputs		
Form A (SPST)	5A@250VAC, 5A@30VDC (resistive)		
Form C (SPDT)	10A@240VAC, 8A@24VDC (resistive)		
DC SSR	210mA, 400VDC		
AC/DC SSR	140mA, 400VDC or peak AC		
Open Collector	40V, 50mA from external V+ or internal 5V (no isolation to function common)		

**WESCHLER INSTRUMENTS**

70 Years of Power and Process Measurements

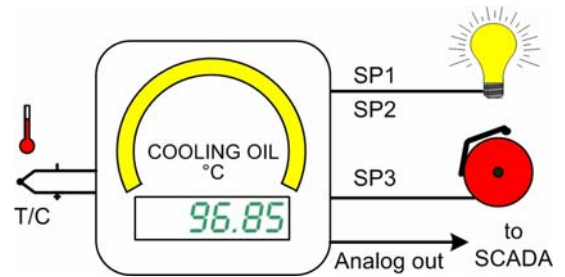
Phone: (440) 238-2550 Email: sales@weschler.com

# Premo BarGraph Applications

Sample applications which illustrate a few of the many capabilities of the Premo family.

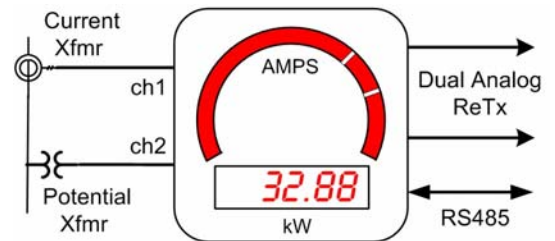
## Single Channel Indicator with Alarms

The Premo is configured with a thermocouple input, tricolor bar, 4 relays and analog retransmit. Both the bar and the digital display show the temperature. Relay 1 closes below SP1, relay 2 & 3 close above their setpoints. Relay 1 & 2 are wired in parallel to a warning light, indicating too low or too high a temperature (amber bar). Relay 3 activates a warning bell for an emergency over temperature condition (red bar). For normal temperatures the bar is green. The temperature is transmitted to a SCADA system by the 4-20mA analog output.



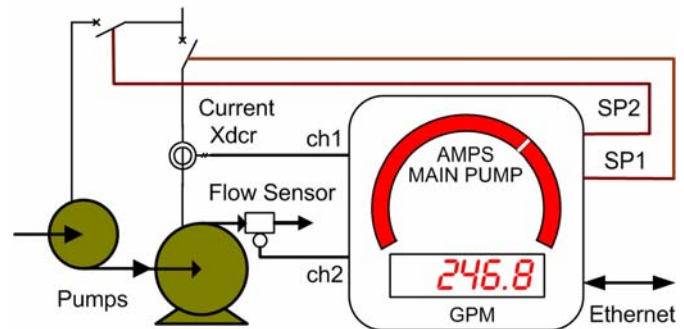
## Power Monitor with Retransmit

For measurement of AC power, the Premo is configured with the KAP input module. A CT is connected to ch 1, a PT to ch 2. The bar is setup to show load amps. The digital display reads kW. Pressing the up arrow momentarily shows amps in the digital display. Pressing the down arrow alternately shows volts and power factor. kW and power factor are retransmitted on the dual analog output. All four values are available through the RS485 interface.



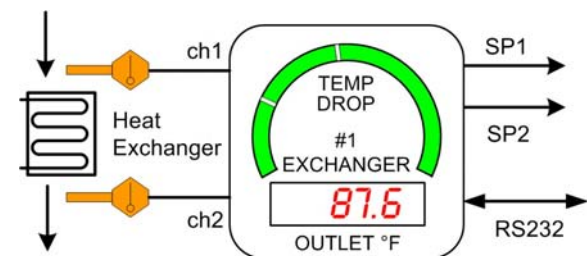
## Two Channel Indicator with On/Off Control

The Premo is configured with a 2 channel process input, red bar, 2 relays and Ethernet. An AC current transducer with a 0-5VDC output connects to channel 1. The bar shows the pump motor load current. The digital display shows flow rate from an inline sensor with a 4-20mA output connected to channel 2. A booster pump is activated when the flow rate exceeds setpoint 2 (hysteresis or timer modes can be used to prevent short cycling). The main pump is shut down (using timer or manual reset modes) when its current exceeds setpoint 1. Channel readings & status are sent to the factory network through the Ethernet interface.



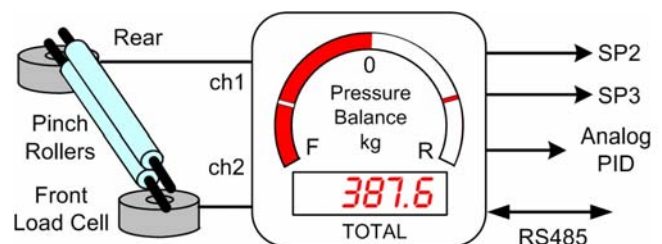
## Two Channel Monitor with Datalogging

The Premo is configured with a 2 channel RTD input, tricolor bar, expanded memory, RS232 interface and 4 relays. The RTD sensors are placed at the inlet and outlet of a heat exchanger. The outlet temperature appears on the digital display. The bar (with expanded scale) shows the temperature drop in the heat exchanger (ch1-ch2). A green zone is defined for >20°, amber for 10-20°, red for <10°. Setpoint relays are used to warn of malfunctions and activate additional cooling. Cyclic datalogging stores readings that can be transferred to a service-man's laptop for fault analysis.



## PID Control & Macro Functions

This application measures the force on each end of a pinch roller. The Premo is configured with a 2 channel load cell module, red bar, 4 relays, analog output, standard memory and RS485 communication. The center zero bar shows the pressure difference (ch1-ch2). The digital display shows the total pressure (ch1+ch2). Setpoint 1 is used to configure analog PID control of the total pressure. SP2 & 3 activate left or right relief valves when the imbalance exceeds either setpoint. The macro is used for the special math calculation.



# Premo BarGraph Configuration Guide

PART NUMBER

Select desired code for each category to build the 15 digit part number

Also specify input range, faceplate scale and faceplate legends when ordering.

Certain option combinations not available on all models.

											X				
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### TYPE

P Premo Bargraph Meter

### STYLE

C 4.25" Switchboard (BG241P)  
 D 12" Edgewise Vertical (BD101P)  
 G 6" Edgewise Vertical (BG252P)

### BAR COLOR

R Red  
 G Green  
 T Tricolor

### DIGITAL DISPLAY COLOR

R Red  
 G Green

### INPUT (SINGLE CHANNEL) †

- ABQ AC 200mV/2V/20V, scaled RMS
- AAQ AC 200/600V, scaled RMS
- AGQ AC 200mV/2V/20V, True RMS
- AFQ AC 200/600V, True RMS, 6kHz max.
- ACQ AC 2/20/200mA, scaled RMS
- ADQ AC 1A, scaled RMS
- AEQ AC 5A, scaled RMS
- AHQ AC 2/20/200mA, True RMS
- AJQ AC 1A, True RMS, 1kHz max.
- ALQ AC 5A, True RMS, 1kHz max.
- DBQ DC 20/50/100/200mV §
- DAQ DC 2/20/200V/Custom §
- DHP DC 2/20/200V/Custom w/ Ext. Decimal Select
- DCQ DC 2/20/200mA §
- DGQ DC 1A
- DDQ DC 5A
- PDQ Universal Process 2/5/10/20/200V/2mA/20mA/Custom §
- REP Resistance, 2/3/4-wire, 200/2k/20kΩ
- RCQ Linear Potentiometer, 3-wire, 1kΩ min
- TMP Thermocouple Input, J/K/R/S/T/B/N §
- THP RTD, 100Ω Pt. 2/3/4-wire
- TKP RTD, 120Ω Nickel 2/3/4-wire
- TLP RTD, 10Ω Copper 2/3/4-wire
- GBQ Direct Pressure, 1 psi differential/gage §
- GDQ Direct Pressure, 5 psi differential/gage §
- GEQ Direct Pressure, 15 psi absolute §
- GFQ Direct Pressure, 15 psi differential/gage §
- GGQ Direct Pressure, 30 psi absolute §
- GHQ Direct Pressure, 30 psi differential/gage §
- GJQ Direct Pressure, 100 psi absolute §
- GKQ Direct Pressure, 100 psi differential/gage §
- SAQ Strain Gage 5/10VDC Exc., 2/20mV/V, 4/6-wire
- SBQ Pressure 5/10VDC Exc., 2/20mV/V, 4/6-wire
- SCQ Pressure Ext Exc., 2/20 mV/V, 4/6-wire
- SDQ Pressure/Load Cell 2/20mV/V, 5/10V Exc, 4-wire
- SEQ Pressure/Load Cell Ext Exc., 2/20mV/V, 4-wire
- SFQ Pressure 2/20 mV/V w/ High Impedance, External Excitation
- EAP Line Frequency, 50-500VAC
- FAP Univ. Frequency/RPM/Up Down Counter, 0-24V, 100Hz-100kHz §
- CAP Quadrature Counter, 0-24V, 20kHz max §\*
- CBP Quadrature Counter, 0-24V, 20kHz max with dual SSRs §\*
- HAP pH indication w/ Manual Temperature Compensation
- HBP pH indication w/ Automatic Temperature Compensation
- HCP Oxidation Reduction Potential (ORP)
- KAP Single Phase Power (Watts, V, A, Hz, PF, Whr) 300V/1A\*
- KBP Single Phase Power (Watts, V, A, Hz, PF, Whr) 300V/5A\*
- KCP DC Watts, 200V / 50mV from shunt
- KDP Single Phase Power (Watts, V, A, Hz, PF, Whr), 600V/1A\*
- KEP Single Phase Power (Watts, V, A, Hz, PF, Whr), 600V/5A\*
- DAS DC 25mV-2V, 16 bit, 1-800Hz update rates (50Hz) §\*
- DBS DC 25mV-2V, 16 bit, 1-960 Hz update rates (60Hz) §\*

### OPTIONS

- D External dimming
- W Spray tight front bezel (style C only)
- K Conformal coating
- M 512M SD memory card (styles G & D only)
- Y Spray tight front & rear (style C only)

### NON-VOLATILE MEMORY

- A 1M data memory with real time clock
- X Standard memory (macro & linearization)

### RELAYS

- E One 10A Form C
  - C Two 10A Form C
  - D Two 10A Form C & Two 5 Amp Form A\*\*
  - F Four 5A Form A
  - H Six 5A Form A\*\*
  - J Four 400V, 210mA DC SSR
  - K Four 400V, 140mA AC/DC SSR
  - L Six Open Collector or 5V TTL Outputs\*\*
  - S Special
  - X None
- \*\* shared commons

### COMMUNICATIONS

- 1 Isolated USB, ASCII Protocol
- 2 Isolated RS-232, ASCII Protocol (includes CBL2 cable)
- 3 Isolated USB, Modbus Protocol
- 4 Isolated RS-485, ASCII Protocol (includes CBL4 cable)
- 5 Isolated RS-232, ModBus RTU
- 6 Isolated RS-485, ModBus RTU
- 8 Isolated Ethernet, ASCII
- 9 Isolated Ethernet, Modbus TCP

### RETRANSMIT

- A Isolated 16 Bit Current Output, 4-20mA
- V Isolated 16 Bit Voltage Output, 0-10VDC
- D Isolated 16 Bit Voltage Output, Dual 0-10VDC
- S Special
- X None

### POWER

- 1 85-265VAC / 95-370VDC (orange connector)
- 2 18-48VAC / 10-72VDC (black connector)
- S Special

- DCS DC 25mV-2V, 16 bit, 1-800Hz w/ dual isolated SSRs (50Hz) §\*
- DDS DC 25mV-2V, 16 bit, 1-960Hz w/ dual isolated SSRs (60Hz) §\*
- DES DC 30mV-60V, 24 bit (1 million count) 1-400Hz (50Hz) §\*
- DFS DC 30mV-60V, 24 bit (1 million count) 1-480Hz (60Hz) §\*
- DGS DC 30mV-60V, 24 bit 1-400Hz w/ dual isolated SSRs (50Hz) §\*
- DHS DC 30mV-60V, 24 bit 1-480Hz w/ dual isolated SSRs (60Hz) §\*
- RAS Single 3-wire Potentiometer, 24 bit (50Hz) \*
- RBS Single 3-wire Potentiometer, 24 bit (60Hz) \*
- SGS Pressure/Load Cell, 16 bit (50Hz) \*
- SHS Pressure/Load Cell, 16 bit (60Hz) \*
- SKS Pressure/Load Cell, 1-20mV/V, 24 bit (50Hz), 5V Excitation \*
- SLS Pressure/Load Cell, 1-20mV/V, 24 bit (60Hz), 5V Excitation \*
- YAS Magnetostrictive § \*
- XSX Special

§ includes 24V sensor excitation  
 \* module includes A/D converter & digital signal processor

Example: PCTRDBQ1A2FXDWX

(P) Premo, (C) 4.25" switchboard case, (T) tricolor bar, (R) red digital, (DBQ) DC mV input, (1) high voltage supply, (A) 4-20mA retransmit, (2) RS-232 ASCII, (F) four 5A relays, (X), (X) standard memory, (W) spray tight front, (X) no other option

† See [www.weschler.com](http://www.weschler.com) for multi-channel & multi-function input modules.

# Premo BarGraph Configuration Guide

## INPUT (MULTIPLE CHANNELS)

DAD	Dual DC 50mV §	TAT	Triple Thermocouple J/K/R/S/T/B/N
DBD	Dual DC 2V §	TBT	Triple RTD, 2-wire, 100Ω Pt
DCD	Dual DC 2mA §	TCT	Triple RTD, 4-wire, 100Ω Pt
DDD	DC 2V and 50mV §	TAF	Quad Thermocouple J/K (50Hz) *
DED	Dual DC 25mV-2V, 16 bit, 1-20Hz update (50Hz) §*	TBF	Quad Thermocouple J/K (60Hz) *
DFD	Dual DC 25mV-2V, 16 bit, 1-20Hz update (60Hz) §*	TCF	Quad RTD, 2-Wire, 100Ω Pt
DAT	Triple DC 50mV §	TDF	Quad RTD, 4-wire, 100Ω Pt
DBT	Triple DC 2V §		
DAF	Quad DC 50mV §	VAD	DC 2V and 4-20 mA §
DBF	Quad DC 2V §	VBD	DC 50mV and 4-20 mA §
		VCD	Thermocouple J/K/R/S/T and 4-20mA §
FAD	Dual Frequency §	VDD	RTD 3-Wire, 100Ω Pt and 4-20mA
FBD	Dual Up/Down Counter §	VED	Strain Gage and Frequency
		VFD	RTD 3-wire, 100Ω Pt and 2V DC
GBD	Dual Direct Pressure, 1 psi differential/gage †	VGD	Thermocouple J/K/R/S/T/B/N and DC 2V §
GDD	Dual Direct Pressure, 5 psi differential/gage †	VHD	Thermocouple J/K/R/S/T/B/N and DC 50mV §
GED	Dual Direct Pressure, 15 psi absolute †	VJD	Thermocouple J/K/R/S/T/B/N and Load Cell
GFD	Dual Direct Pressure, 15 psi differential/gage †	VKD	DC 25mV-2V & Resistance <10Ω (4 wire) §*
GGD	Dual Direct Pressure, 30 psi absolute †	VLD	Load Cell 1-20mV/V, 4/6 wire and RTD Pt100/Ni120/Cu10, 3 wire *
GHD	Dual Direct Pressure, 30 psi differential/gage †	VMD	Load Cell 4/6 wire and 4-20mA *
GJD	Dual Direct Pressure, 100 psi absolute †	VAT	Dual Thermocouple J/K/R/S/T/B/N and DC 2V §
GKD	Dual Direct Pressure, 100 psi differential/gage †	VBT	Dual Thermocouple J/K/R/S/T/B/N and 4-20mA §
GBT	Direct Pressure, 1 psi differential w/ 2 Digital Inputs	VCT	Dual Thermocouple J/K/R/S/T/B/N and DC 50mV §
GDT	Direct Pressure, 5 psi differential w/ 2 Digital Inputs	VDT	Thermocouple J/K/R/S/T/B/N and Dual DC 50mV §
GET	Direct Pressure, 15 psi absolute w/ 2 Digital Inputs	VET	Thermocouple J/K/R/S/T/B/N and Dual DC 2V §
GFT	Direct Pressure, 15 psi differential w/ 2 Digital Inputs	VFT	Thermocouple J/K/R/S/T/B/N and Dual 4-20mA §
GGT	Direct Pressure, 30 psi absolute w/ 2 Digital Inputs	VGT	Thermocouple J/K/R/S/T/B/N and DC Volt and DC 50mV §
GHT	Direct Pressure, 30 psi differential w/ 2 Digital Inputs	VHT	Thermocouple J/K/R/S/T/B/N and 4-20mA and DC 50mV §
GJT	Direct Pressure, 100 psi absolute, w/ 2 Digital Inputs	VJT	Thermocouple J/K/R/S/T/B/N and 4-20mA and DC 2V §
GKT	Direct Pressure, 100 psi differential w/ 2 Digital Inputs	VKT	Thermocouple and 4-20mA and Frequency §
		VLT	Thermocouple and 2V and Frequency §
PAD	Dual Process Loop, 4-20mA §	VMT	Dual RTD 3-Wire, 100Ω Pt and Frequency §
PAT	Triple Process Loop, 4-20mA §	VPT	Load Cell 1-20mV/V and 2 Digital Frequency/Count Inputs (50Hz) §*
PAF	Quad Process Loop, 4-20mA §	VQT	Load Cell 1-20mV/V and 2 Digital Frequency/Count Inputs (60Hz) §*
		VRT	Pressure Direct and Dual Frequency/Counter §*
RCD	Dual Resistance Input, 0.2/2/20kΩ	VAF	Dual DC 2V + RTD 3-Wire, 100Ω Pt + Frequency §
RDD	Dual 3-wire Potentiometer, 1k-100kΩ (50Hz) *	VBF	Process*** + 3 Digital Inputs §
RED	Dual 3-wire Potentiometer, 1k-100kΩ (60Hz) *	VAX	Triple RTD 4-wire, 100Ω Pt + 2 Process*** + 1 Digital Input (50Hz) *
RAF	Quad Potentiometer/Resistance, 1k-100kΩ *	VBX	RTD 3 wire, 100ΩPt + 2 Process*** + 1 Digital Input (60Hz) *
SAD	Dual Strain Gage, 4 wire, 2/20mV/V	YAD	Dual Photo Diode Input *
SED	Dual Pressure Input, 4 wire, 2/20mV/V	YBD	Dual LVDT 1.2-9.6kHz, 3V Exc., w/ 2 relay drivers (50Hz) *
SMD	Dual Pressure/Load Cell, 1-20mV/V, 5V Excitation, 16 bit (50Hz) *	YCD	Dual LVDT 1.44-11.52kHz, 3V Exc., w/ 2 relay drivers (60Hz) *
SND	Dual Pressure/Load Cell, 1-20mV/V, 5V Excitation, 16 bit (60Hz) *		
SAF	Quad Pressure/Load Cell, 1-20mV/V, 5V Excitation (50Hz) *		
SBF	Quad Pressure/Load Cell, 1-20mV/V, 5V Excitation (60Hz) *		
TAD	Dual Thermocouple J/K/R/S/T/B/N §		
TBD	Dual RTD 2/3-wire, 100Ω Pt		
TCD	Dual RTD 4 wire, 100Ω Pt (50Hz) *		
TDD	Dual RTD 4 wire, 100Ω Pt (60Hz) *		

† standard with same range on both channels; different ranges available on special order

§ includes 24V sensor excitation

\* module includes A/D converter &/or digital signal processor

\*\*\* 2/5/10/20V and 2/20mA DC ranges

## Accessories

PRE/CBL2	RS232 serial cable, 6ft (1.9m), RJ6 phone plug to DB9
PRE/CBL4	RS485 serial cable, 6ft (1.9m), RJ6 phone plug to DB9
PRE/CBL5	RJ6 to RJ6 serial cable, 6ft (1.9m)
PRE/ADP4	RS485 daisy chain adapter, dual 6 pin RJ6
PRE/ADP5	6 pin terminator plug for RS485
PRE/PSL	120VAC to 24VDC wall adapter, 0.5A output

## Spare Mating Connectors

PRE/PLUG2-RA	Right angle connector, 2 pin (input)
PRE/PLUG2-ST	Straight connector, 2 pin (analog output)
PRE/PLUG3-RA	Right angle connector, 3 pin (input)
PRE/PLUG3-ST	Straight connector, 3 pin (dual analog output)
PRE/PLUG4-RA	Right angle connector, 4 pin (input)
PRE/PLUG4-ST	Straight connector, 4 pin (relay x2)
PRE/PLUG5-RA	Right angle connector, 5 pin (input, function)
PRE/PLUG6-RA	Right angle connector, 6 pin (input)
PRE/PLUG7-RA	Right angle connector, 7 pin, 3.5mm pitch (function)
PRE/PLUG8M-RA	Right angle connector, 8 pin, 3.5mm pitch (input)
PRE/PLUG11M-RA	Right angle connector, 11 pin, 3.5mm pitch (input)
PRE/PWR2H-RA	Right angle power plug, 2 pin high voltage (orange)
PRE/PWR2L-RA	Right angle power plug, 2 pin low voltage (black)

**WESCHLER INSTRUMENTS**

70 Years of Power and Process Measurements

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