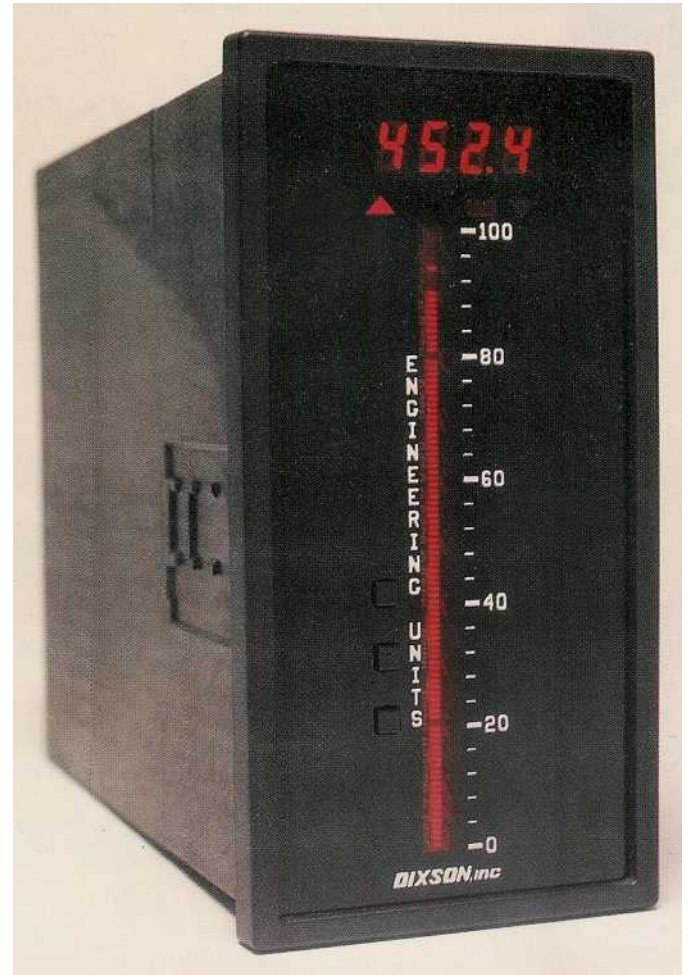


## Features / Highlights

- Reduced Power Consumption
- Programmable Configuration by:
  - Front Panel Switches
  - PC Serial Link
- Scale Ranges Switch Selectable
- Linearization of Input Signals
- Auto Calibration Algorithm
- Modular Design for Flexibility & Options
- Vertical and Horizontal Orientation
- Display Dimming
- Max/Min Signal Memory
- Digital Reading to +/- 10% in Underrange or Overrange
- Auxiliary Transducer Power Supply
- Two Wire Isolated Retransmission
- RS-485 Serial Communication
- Temperature Measurement
- Single Model available with or without Programmable Switches on Front
- High Resolution and Accuracy
- Illuminated LED Display for Excellent Visibility
- Microprocessor Based Design
- Rugged - High Resistance to Vibration & Shock
- Minimum 88,000 Hour MTBF
- Single & Dual Models
- On/Off Control via Three Set Points
- Front Panel Mounting
- Underrange / Overrange Indication



Dixson's bargraph instruments combine the incremental trend indication of an analog meter with the precision of a 4 digit LED display for superior presentation of process information. Option PCB's expand the instruments basic display capability for control, temperature measurement, external sensor power, retransmission, serial communication, and other applications.

Special features of the model can be accessed through front panel program switches, or by a personal computer through a serial communications port on the rear of the instrument. The front panel switches may be locked out to prevent tampering, or accessed from a connector on the rear of the instrument. The modular design is ideal for ease of manufacture and user flexibility.

Units are available as stock units for user set-up, or as "ready to use" factory configured and calibrated to your specification. Calibration requires no completion components or potentiometer adjustments. The smart calibration and configuration system stores this information in nonvolatile memory. A self test on power up confirms the presence of valid data for all programmable features.

The enclosure for the indicator is a non-glare black Noryl or ABS case complying with UL94 V-0 or V-1. UL/CSA certification is in process. Red LED's are standard for the bargraph and the digital display, with amber and green color options. Scales are polycarbonate with a glare reducing hard coated surface. Standard scales are available, or custom scales to meet exact specifications.

# Specifications

## ELECTRICAL PERFORMANCE

Resolution: Bargraph (101) segments	1.0%
Digital (4 digits)	0.01% ± 1 count*
Operating Temperature Range	
MIL-E16400G, Class 4	0-60°C
Storage Temperature Ranges	-40°C to +85°C
Power Requirements, 120/240 VAC, 50, 60 or 400 Hz	
Line Regulation	
Basic Instrument	± 15%
Fully Optioned	± 10%
Power Consumption (Typical, Depends on Options)	
B101P	3.5 VA
B202P	7.0 VA

## SENSITIVITY RANGES (Reference ANSI C39.1 Std. Sensitivities) STANDARD FULL SCALE INPUTS FROM ZERO

### Dipswitch Selectable:

DC Currents	500µA to 50mADC
DC Voltages	1VDC to 250VDC

### OPTIONAL FULL SCALE INPUTS FROM ZERO

DC Currents	50µA to 250mA
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### Plug in modules:

RS 422/485	Serial Data Comm.
DC Voltages	50mV to <1000mV
AC Currents	1mA to 1000mA
(and 5 amp current transformers)	
AC Voltages	250mV to 250V
Thermocouple - Type E	-100°C / +1000°C
Thermocouple - Type J	-18°C / + 760°C
Thermocouple - Type K	-18°C / + 1,370°C
Thermocouple - Type T	-160°C / +400°C
RTD (100 ohm Platinum)	-200°C / +850°C

## DC INPUT PARAMETERS

Linearity	0.02% of Span ± 1 count *
Accuracy	0.04% of Span ± 1 count *
Zero Stability	<0.01%/°C
Gain Stability	<0.02%/°C

## INPUT IMPEDANCE:

Voltage Inputs	>200K
4/20 mADC	100 OHM Compliance Resistor
10/50 mADC	40 OHM Compliance Resistor
All other current inputs	Consult Factory
Response Time (typical)	175 ms
Overload (signal)	200% or 250 VDC Max..

## AC INPUT PARAMETERS (true RMS reading)

Linearity **	0.4% of Span
Accuracy **	0.5% of Span
Zero Stability	< 0.04%/°C
Gain Stability	< 0.04%/°C
Input Impedance for Voltage Inputs	>200K
Response Time (typical)	325 ms
Overload (signal)	200% or 250 VAC Max.

## SET POINT OPTION: (Internal Module)

Standard Set Points	LO and HI
Configurable Alarm	HI/HI (default) or LO/LO
Setability	0.1%
Hysteresis	1.0%
Relay Response Time (typical)	For DC Inputs: 350 ms For AC Inputs: 650 ms
Relay Contact Ratings: 3 Form C	0.4A @ 125 VAC 2A @ 30 VDC

## RETRANSMISSION

Accuracy	± 0.1%
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## LINEARIZATION

Eighth order polynomial (nine terms). Refer to "PRO" Series Interface Kit.

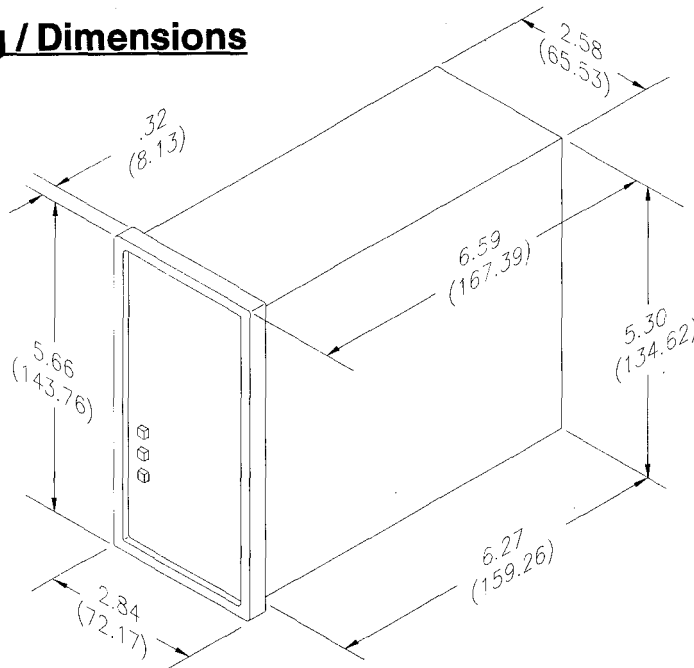
## DIGITAL DISPLAY

Minus Sign	Negative ( - ) 9999 to 9999 Standard (N/A on Model B202P)
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\* 1 Count defined as a ± unit value change of the right most digit.

\*\* Except for first 5% of span.

## Outline Drawing / Dimensions



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