Programmable Digital Panel Meters.

4500 Series - 3 1/2 Digit, 1999 Count
4550 Series - 4 1/2 Digit, 19999 Count

Microprocessor Based DPM / Controller

- DC Current and Voltage
- AC True RMS Current and Voltage
- Frequency
- Temperature - Thermocouple & RTD
- Blue-green Vacuum Fluorescent Display
- Fits in DIN and NEMA cutouts
- Screw terminals standard
- Snap-in case - no tools required
- Price competitive
- Setpoint Outputs Relays:
  Solid-State or Electromechanical
- Communications:
  RS-232C, RS 422 or Current Loop
- Analog Output available

The 4500 digital panel and control meters are microprocessor-based and front panel programmable. The 4500 Series provides many important features, from simple indication to PID control and dual outputs. The 4500 Series meters can accept any type of measurement input and can display in any engineering units. The Indicator version stores minimum and maximum input values for instant recall on demand. The Controller version can provide up to two alarm/control relay outputs and is an ideal replacement for analog type meter-relays.

General Specifications

Reference Condition: +23°C/117 VAC at 60Hz
Display: 7 segment numeric blue/green vacuum flourescent with negative sign and annunciator arrow
Character Height: 3 1/2 digit units: 0.6" (14.5mm), 4 1/2 digit units: 0.4" (11.0mm)
Assembly: Plug-in electronics with plastic case.
Connections: Input and Output connections are screw terminals. Communication outputs are provided via a 20 pin card edge. Cable adaptor also available.
Input Power: 6 Watts typical at 117VAC, 50/60Hz. 220 and 240VAC optional.
Temperature Ratings:
Operating: +5°C to +55°C
Storage: -20°C to +85°C
Input Impedance:
2VDC Unit > 100 megohms
200mVDC Unit > 100 megohms
Thermocouples > 10 megohms
Conversion Rate: 2.5/second (other rates available, contact factory)
Noise Rejection (depending upon unit)
Common Mode - 130dB typical
Normal Mode - 90dB typical
Temperature Stability:
3 1/2 digit / 2VDC range: 50ppm/°C Maximum
4 1/2 digit / 2VDC range: 15ppm/°C Maximum
1° RTD Input: 115ppm/°C Maximum
T/C Input: 7µV/°C or ±0.2 count (whichever is greater)
Accuracy (Typical):

Unit Type	Model 4500	Model 4550
DC Inputs	±1 Count	±2 Counts
AC Inputs	±0.5% of Reading ±0.1% of Full Scale	N/A
Thermocouple Inputs	±1°F	±1°F
RTD Input	±1°F	±0.1°C ±0.2°F

Warm-up Time: Less than 5 minutes in most ranges.
Sensor Break Protection: Standard for thermocouple and RTD inputs.
Response Time: 3.2 seconds with digital filtering (faster response times available)

Communications Options

Digital:
Handshake, Parity and Baud rates selections available.
Transmit PV or full 2 way communications.
RS232C: Isolated or non-isolated
RS422: Isolated
Current Loop: 20mA DC, isolated
Analog: Linearized representations of input,
0 to 10 VDC, ±65mV accuracy. 8 bit resolution.

Input

Current and Voltage (Single Ended)

Type	Model 4500	Model 4550
AC Current (RMS)	200µA to 5 Amp	N/A
DC Current	20µA to 200mA	200µA to 200mA
AC Voltage (RMS)	200mV to 200V	N/A
DC Voltage	20mV to 200V	200mV to 200V

Thermocouple (Standard Selection)

Type	Total Span Provided	Span @ ±1°F Conformance
J	-299°F to +1400°F	-200°F to +1400°F
K	-341°F to +2500°F	-70°F to +2500°F
R	-32°F to +3199°F	-495°F to +3199°F
S	-32°F to +3180°F	-330°F to +3180°F
T	-380°F to +740°F	-210°F to +740°F
E	-178°F to +1830°F	-90°F to +1610°F
B	-32°F to +3259°F	-1320°F to +3259°F

Thermocouple (Alternate Selection)

J	-299°F to +1400°F	-200°F to +1400°F
N	-200°F to +2300°F	-50°F to +2300°F
Platinel II	-115°F to +2500°F	+85°F to +2500°F
Ni/Ni 18% Moly	0°F to +2390°F	+110°F to +2390°F
W5Re/W26Re	+32°F to +3260°F	+500°F to +3260°F
W3Re/W25Re	+32°F to +3260°F	+750°F to +3260°F
W/W26Re	+32°F to +3260°F	+1200°F to +3260°F

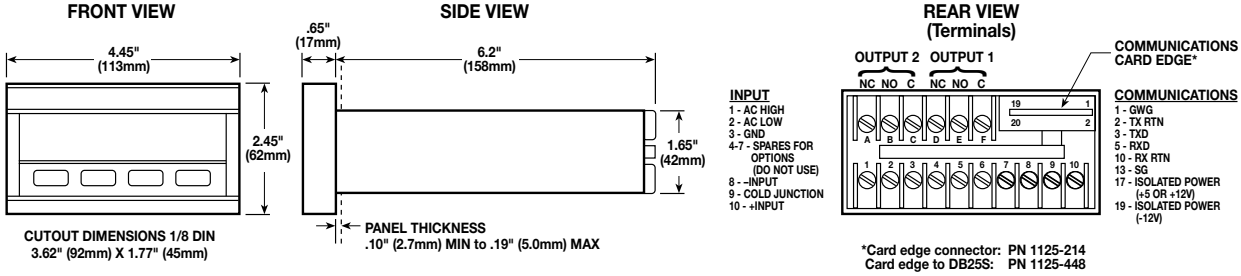
RTD: 100 Ohm Platinum Type I, at 3850 ppm DIN Standard

1.0°	-300°F to +1400°F	-300°F to +1400°F
0.1°	-300.0°F to +1400.0°F	-300.0°F to +1400.0°F

Output

Electromechanical Relays: Form C, 2 Amp maximum
Solid State Relays: 2.5 reading/second
Analog: 0 to 10 VDC proportional to 0 to 100% output power. 2K Ohm minimum load.
Resolution
Setpoints: ±1 Count
Control: Model 4500 ±0.1 Count
Model 4550 ±1 Count
On/Off Deadband Selection: 0.005, 0.2, 0.5 and 1% of Span
Alarm Deadband: 0.4% of Span
Cycletime Setting Selection: 2, 6, 15, 30 Seconds
Proportional Band Setting Selection: 1, 2, 4, 8, 16, 32 or 64% of Span
Reset Setting Selection: Off, 0.5, 0.25, 0.8 repeats per Min.
Anti-Reset Windup: Standard

Dimensional Diagram



*Card edge connector: PN 1125-214
Card edge to DB25S: PN 1125-448

Call 1-800-TRIPLETT for more Information