

# Hawk 3 Digital Panel Meter/Controller



- All parameters set from easy to understand front panel access
- One, two or four 5-amp relays optional
- Five user-selectable brightness levels
- 1/8 DIN, shallow depth case, 3.24"
- RS485 digital communications optional (H345)
- 12 or 24 DCV power supply output optional
- 4-20mA or 0-10 DCV analog transmission optional
- NEMA 4X rated front panel
- DIN Rail adapter available (page C1)

## Specifications

<b>DISPLAY</b>	
Type	7-segment, red LED
Quantity	4 or 5
Brightness	5 user-selectable levels
Height	0.56" (14.2mm)
Decimal point	4 or 5 position, user programmable
Overrange indication	Display flashes "EEEE" indicating Maximum Value Exceeded
Underrange indication	Display flashes "-EEEE" indicating Minimum Value Exceeded
Alarm Indicators	4 LED indicators for up to four independent setpoints

### POWER REQUIREMENTS

AC	120, 85-250 VAC @ 10VA
DC	9-36 DCV @ 10VA

### ACCURACY @ 25°C as % of rdg

	4-1/2 digit	3-1/2 digit
<b>DC Current</b>		
High (5A, 2A)	0.2% ± 1 count	0.3% ± 1 count
All Others	0.05% ± 1 count	0.1% ± 1 count
<b>DC Volts</b>		
High (600 V)	0.1% ± 1 count	0.2% ± 1 count
All others	0.05% ± 1 count	0.1% ± 1 count
<b>Resistance</b>		
All ranges	0.1% ± 2 counts	0.1% ± 2 counts
<b>*AC Current</b>		
High (2A, 5A)	0.2% ± 2 counts	0.3% ± 2 counts
All others	0.1% ± 2 counts	0.2% ± 2 counts
<b>*AC Volts</b>		
High (600V)	0.1% ± 1 count	0.2% ± 1 count
All others	0.05% ± 1 count	0.1% ± 1 count

\* AC functions measured at 50 Hz, include ± 1 count for each additional 100 Hz above 50 Hz

### ENVIRONMENTAL

Operating Temperature	0 to 50°C
Storage Temperature	-10 to +60°C
Relative Humidity	<80%
Ambient Temperature	25°C
Temperature Drift	100 ppm/°C
Warmup time	10 minutes
Noise Rejection	
NMRR	60 dB @ 50-60 Hz
CMRR	70 dB @ 50-60 Hz

### A TO D CONVERSION

Technique	Successive approximation with oversampling
Sample Rate	10 conversions per second
Display Rate	User programmable 1-420 updates/min (240 default)

### MECHANICAL

Bezel	3.9" x 2.0" x 0.52" (99.8mm x 51.9mm x 13.2 mm)
Depth	3.24" (82.3 mm)
Panel cutout	3.62" x 1.77" (92 mm x 45mm)
Weight	10 oz (283.5g)
Cover	NEMA 4X Rated front panel



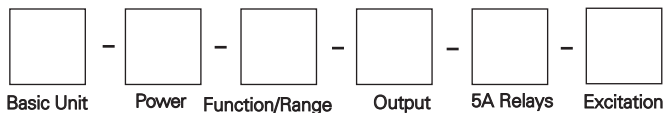
more >>

# Hawk 3 Temperature Meter/Controller



- All parameters set from easy to understand front panel access
- One, two or four 5-amp relays optional
- 7-segment 4 digit red LED
- Five user-selectable brightness levels
- Activated set point indicators on display
- Min/Max and password lockout
- NEMA 4X rated front panel
- RS485 digital communications output available by special order
- 4-20mA or 0-10 DCV analog retransmission optional
- 1/8 DIN, shallow depth case, 3.24"
- Din Rail Adapter available (page C1)

## Ordering Information



Selection Description Selection Description

Selection	Description	Selection	Description
H340	<b>Basic Unit</b> 4 digit, Red LED	0	<b>Output</b> None
		1	4-20 DCmA
		2	0-10 DCV
1	<b>Power Supply</b> 120 ACV		
3	9-36 DCV	0	<b>5A Relays</b> None
4	85-250 ACV	1	One
		2	Two
91	<b>Function/Range</b> J Thermocouple	4	Four
92	K Thermocouple		
93	RTD, PT100 3-wire	0	<b>Excitation</b> None
94	E Thermocouple	1	12 DCV - 100mA max current
95	T Thermocouple	2	24 DCV - 100mA max current

## Specifications

### DISPLAY

Type	7-segment, red LED
Quantity	4
Height	0.56" (14.2mm)
Brightness	5 settings, user programmable
Overrange indication	Display flashes "EEEE" indicating Maximum Value Exceeded
Underrange indication	Display flashes "-EEEE" indicating Minimum Value Exceeded

Sensor Break Excitation	Display reads "EEEE" 100mA Max Current
-------------------------	---

### POWER REQUIREMENTS

AC	85 to 250 VAC/120VAC @ 10VA
DC	9 to 36 DCV @ 10VA

ACCURACY @ 25°C as % of rdg	Accuracy	Temperature Range
Sensor Type		
RTD Pt 100	0.2% ± 2 counts	-200°C to +200°C
J	0.2% ± 2 counts	-100°C to +760°C
K	0.2% ± 2 counts	-200°C to +1250°C
E	0.2% ± 2 counts	-100°C to +800°C
T	0.2% ± 2 counts	-200°C to +400°C

### ENVIRONMENTAL

Operating Temperature	0 to 50°C
Storage Temperature	-10 to +60°C
Relative Humidity	<80%
Ambient Temp	25°C
Temperature Drift	100 ppm/°C ± 0.05 dgt/°C
Warmup time	10 minutes

### NOISE REJECTION

NMRR	60 dB @ 50-60 Hz
CMRR	100 dB @ 50-60 Hz

### A TO D CONVERSION

Technique	Successive approximation with oversampling
Sample Rate	10 conversions per second
Display Rate	User programmable from 1/minute - 8/second

### MECHANICAL

Bezel	3.92" X 2.0" X 0.52" (99.8mm x 51.8mm x 13.2mm)
Depth	3.24" (82.3mm) behind panel
Panel cutout	3.62" x 1.77" (92 mm x 45 mm) 1/8 DIN
Weight	10oz (283.5g)
Cover	NEMA 4X Rated front panel



Panel Cutout Dimensions on page A14

more >>