

Hawk 3 Advanced Digital Panel Meter & Controller



- All parameters set from easy to understand front panel access
- One, two or four 5-amp relays optional
- 7 segment 3-1/2 or 4-1/2 digit red LED
- Five user-selectable brightness levels
- Activated set point indicators on display
- 16-point scaling linearization (H345)
- Screw terminals for easy installation
- 1/8 DIN, shallow depth case, 3.24"
- Min/Max and password lockout
- 12 or 24 VDC power supply output optional
- 4-20mA or 0-10 VDC analog retransmission optional



General specifications:

Display: 7-segment, red LED
 Quantity: 4 or 5
 Height: 0.56" (14.2 mm)
 Decimal Point: 4 or 5 position, user programmable
 Brightness: 5 levels, user programmable
 Overrange: Display flashes "EEEE" indicating Maximum Value Exceeded
 Underrange: 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 VDC @ 10VA

Accuracy @ 25°C as percent of reading

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

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*AC Current

High (2A, 5A)	0.2% ± 2 counts	0.3% ± 2 counts
All others	0.1% ± 2 counts	0.2% ± 2 counts

*AC Volts

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 Temp: 0° to +50° C
 Storage Temp: -10° to +60° C
 Relative Humidity: <80%
 Ambient Temp: 25° C
 Temperature Drift: 100 ppm/°C
 Warm-up 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

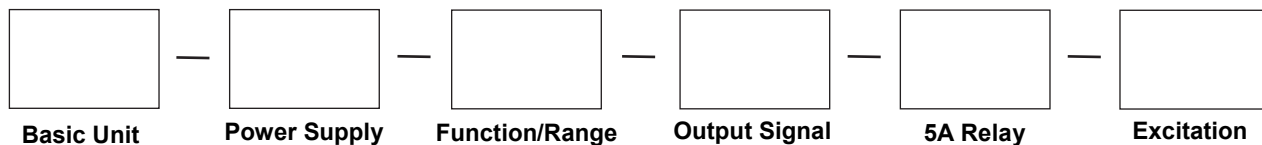
Depth: 3.24" (82.3 mm) behind panel
 Bezel: 3.9" x 2.0" x 0.52" (99 mm x 51 mm x 13.2 mm)
 Panel Cutout: 3.62" x 1.77" (92 mm x 45 mm) 1/8 DIN
 Case Material: Flame Retardant ABS
 Weight: 10 oz. (283.5 g)

Order Information on back side of flyer

Ordering Information

Make a selection from each option to build the part number.

Example: H335-3-71-0-4-1 3-1/2 digit, 9-36 VDC power, 4-20maDC Process, no output signal, 4 relays, 12 VDC excitation



Basic Unit

H335 3-1/2 digit, Red LED
 H345 4-1/2 digit, Red LED

Power Supply

1 120 ACV *3-1/2 only*
 2 85-250 ACV *4-1/2 only*
 3 9-36 DCV
 4 85-250 ACV *3-1/2 only*

Function/Range

11 200 DCmV
 12 2 DCV
 13 20 DCV
 14 200 DCV
 15 600 DCV

21 200 DCμA
 22 2 DCmA
 23 20 DCmA
 24 200 DCmA
 25 2 DCA
 26 5 DCA

31 200 ACmV
 32 2 ACV
 33 20 ACV
 34 200 ACV
 35 600 ACV

41 200 ACμA
 42 2 ACmA
 43 20 ACmA
 44 200 ACmA
 45 2 ACA
 46 5 ACA

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51 200 ACmV
 52 2 ACV TRMS
 53 20 ACV TRMS
 54 200 ACV
 55 600 ACV

61 200 ACμA
 62 2 ACmA TRMS
 63 20 ACmA TRMS
 64 200 ACmA TRMS
 65 2 ACA TRMS
 66 5 ACA TRMS

71 4-20 DMmA Process
 72 0-10 DCV Process

81 200 Ohm
 82 2k Ohm
 83 20k Ohm
 84 200k Ohm

Output

0 None
 1 4-20 DCA
 2 0-10 DCV
 6 RS-485(4-1/2 only)

5A Relays

0 None
 1 One
 2 Two
 4 Four

Excitation

0 None
 1 12 DCV
 2 24 DCV