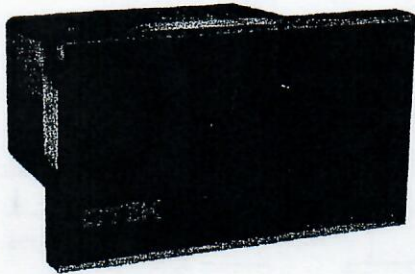


CURRENT LOOP PROCESS MONITOR 4½ & 3½ DIGIT DPM

With: MUX BCD · 3-State BCD · Peak & Hold
· Digital Comparator (Alarm) · μ P Compatible

MODEL

357



4½ DIGIT

Features

- Transmitter Open/Short Alarm
- 8 Process Ranges
- Differential Input
- Large 0.6" Display
- Conditioned 2V Analog Output
- Line or Logic Powered
- Separate Connectors for Signal and AC Power
- MTBF : 100,000 Hours



3½ DIGIT

CURRENT LOOP

DESCRIPTION: Otek's Model 357 Digital Panel Meter is designed to monitor any type of voltage or current from any process. The Model 357 contains a zero adjust and gain adjust that can accommodate any specified engineering units from zero to fullscale. When engineering units are not specified, the display reads 000 to 1000 or 10,000 counts. Another unique feature offered as a standard is the adjustable **under and over detection alarms**, i.e. when the signal falls below 10% of the minimum, signal (3.6mA for 4 to 20mA Range), the 357 will flash negative. It will flash positive when the signal exceeds by 200% of the maximum level (36mA for 4 to 20mA Range). The 357 provides 1mV or 100 μ V/digit analog output for the specified input range.

I/O PORTS: Multiplexed BCD, Busy, Strobe, Hold, Under-range, Over-range, Lamp Test & Display Blank are included.

DIGITAL PEAK & HOLD/RECALL: With this option, the DPM will store both positive and negative peaks as it displays the current data. Since the peaks are stored digitally, there is no droop (drift vs. time). The user can recall or reset the positive and negative peaks by external logic connections.

3T BCD: Tristate Full Parallel BCD can be grouped in 4 bit, 8 bit or 16 bit format with individual digit select "Output Disable" and common "Input Disable" lines, 10 LP Loads of Positive LPTTL Logic is standard (Negative Logic is available on request). A must for μ P, Printer and UART Interface.

DIGITAL COMPARATOR: Compares Internal BCD to External BCD from any source such as Thumbwheel Switches, μ P, etc. High, equal and low logic outputs are available. Two latchable Opto-isolated Triac Drivers of high and low comparison are included. Also, 10 or 100 counts of Hysteresis can be enabled. **Thumbwheel Switches** for the

digital limit are available and must be mounted separately on the panel, they are rear mount type.

FULL SCALE: Adjustment (15 Turns) allows user to scale the reading from front panel (behind filter) to most engineering units requirements.

DECIMAL POINTS: Hard wired selectable at rear connector.

ALARMS: The 357 has a built-in comparator to flash the display when the signal drops 10% below 4mA, or increases over 36mA (200% over range) for the 4-20mA typical range. The trip point is internally adjustable.

POWER: Choice of 5VDC (std.) or AC Input (optional). When 120/240VAC Power Supply is ordered, its primary to secondary isolation is 1200VDC (or RMS) and it can supply the following for external use: +5VDC \pm 5% at 50mA and -5VDC \pm 5% at 5mA. Input is 120/240VAC \pm 10% selectable.

CASE: U.L. approved ABS Polycarbonate 94VO rated.

SPECIFICATIONS AT 25°C

Input	Differential or Single Ended
CMV	\pm 2VAC or VDC with 5 Volt Powered
CMR	90dB
Bias Current	10pA
Sampling Rate	3/Sec. Nominal, 20 Maximum (Specials)
Accuracy	\pm 0.005% \pm 1 Count
Temperature Coefficient	50PPM/°C
Display	3½ or 4½ 0.6" Red LED
All Logic Outputs	1 TTL Load
Overload Indication	Flashing Display
Warm-up Time	Less Than 1 Minute
Operating Temperature	-10° to +60°C
Storage Temperature	-20° to +70°C
Power Requirement	1 Watt at +5VDC
Triac Drivers	10mA at 120VAC

ORDERING INFORMATION (11/100)

RANGE	MODEL	SWITCHES FOR DIG. COMPARATOR
0	4-20mADC	0
1	1-5mADC	1
2	0-20mADC	2
3	10-50mADC	
4	0-5VDC	
5	1-5VDC	
6	0-10VDC	
7	-10 to +10VDC	

POWER & OPTIONS	DISPLAY/RESOLUTION
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
0	0
1	1

(1) When this option is ordered, the power supply must be mounted externally.
Other ranges available on request.

