

DIGITAL PROCESS MONITORS DIGIMATE 2317N (0,1 ,2, Etc.)

The Series DigiMate 2317N instruments are panel mounted Digital Process Monitors designed to interface with two-wire transmitters and other process control instruments. In addition to indication, they provide transmitter power, decimal selection and optional alarm or trip functions and are available in a variety of enclosures to suit the user's needs. These general purpose instruments can be tailored by the user, at site, to suit his range and alarm function requirements.

A DigiMate 2317N incorporates a 24 VDC transmitter power supply, a signal processing module and a precision 3½ dgt A/D converter to display the input signal directly in engineering units. It also provides upto four optional HI/LO alarms and incorporates Industry standard power options. The span, zero and alarm adjustments are accessible from the front after pulling the sliding chassis out without disconnecting signal or power to the instrument. All environment sensitive components are potted in epoxy for reliability. The Instruments are modular in their structure and are designed for better service-ability and are coated with varnish for protection against unfriendly environment.



INPUT SPECIFICATIONS

No of Inputs	One or Two depending on the Model		
Input	mA/Millivolts/Volts depending the Input Processing Option		
Input Impedance	Approx 100 Ohms for mA Input, >100K for mV OR Voltage Input		
Input Processing	Field-scaleable Engineering Units Display in following options		
Option A	4-20mA Linear Processing	Option V	Linear Voltage Input
		Option G	Custom Specified Curve
Instrument Range	Field adjustable within full range of the A/D Converter with 22 Turn Coarse & Fine Trim-pots located inside.		
Common Mode	Common Mode voltage of 110 VAC, 50 Hz produces an error of 0.1% max		

OPERATOR INTERFACE

No of Displays	One or Two depending on Model		
Display Type	7 Segment 3½ dgt 12mm or 4½ dgt 8mm RED/ORANGE LEDs. 20/25mm, 50mm LEDs and Bargraph available in Model 23174 in specific sizes.		
Display Range	Field scaleable within -1999 to 1999 OR -19999 to 19999		
Accuracy	±0.2% of rdg ±1 dgt for 3½ & ±0.05% of rdg ±2 dgts for 4½ dgt display at an operating temperature of 22-32 °C, valid for one year <i>Calibration Cycle</i>		
Decimal Point	Field selectable through a DIL switch or pluggable Shorting Links		
U/R & O/R LEDs	Indicate Under-range and Over-range of input parameter		
Alarm Status	Active alarm is indicated by lighting an LED for each alarm		

OUTPUT SPECIFICATIONS

Xmitter Supply	24V ±5% , 25mA maximum		
Output Options	Option I Indicator only. No Alarm	Option B Indicator & 2 Alarms	
	Option A Indicator & 1 Alarm	Option C Indicator & 4 Alarms	

ALARM OUTPUT SPECIFICATIONS

Alarm Type	User selectable High or Low
Alarm Status	Indicated by an LED on front panel.
Alarm Settings	Settable throughout the Input Range
Acc. of Setting	±0.5% of f.s.
Hysteresis	0.5% of f.s.
Relay Operation	User selectable fail-safe or nonfail-safe
Contact Output	One change-over contact of 230VAC/DC, 3A, 100VA per alarm

POWER SUPPLY SPECIFICATIONS

Power Options **Option A** - 230V AC, 50Hz ± 15%. **Option B** - 110V AC, 50Hz ± 15%.
 Option C- 24V AC, 50Hz ± 15%. **Option D** - 24 V DC ± 15%.

ENVIRONMENTAL SPECIFICATIONS

Rated Temp 5 to 55 °C
Humidity Less than 90% RH (Non-Condensing)
Zero Drift Less than 1dgt for every 10°C outside the recommended 22 - 32 °C ambient
Span Drift Less than 0.0025% of rdg / °C
Storage Temp 0 to 70 °C

MECHANICAL SPECIFICATIONS

Enclosure Type Welded construction with pullout chassis

Painting Powder coated

Encl Options	Option	Enclosure Type	Bezel Size	Cutout Size
	A	Square	72(W) x 72(H)	68(W) x 68(H)
	C	Horizontal	96(W) x 48(H)	92(W) x 44(H)
	D	Square	96(W) x 96(H)	92(W) x 92(H)
	E	Vertical	72(W) x 144(H)	68(W) x 138(H)
	F	Horizontal	144(W) x 72(H)	138(W) x 68(H)
	H	Vertical	96(W) x 192(H)	92(W) x 186(H)
	L	Horizontal	192(W) x 96(H)	186(W) x 92(H)
	G	Custom		User Specified

I/O Terminals Suitable for 1.5 Sq. mm wires. **MKDS 3 of Phoenix** or Equivalent

ACCESSORIES

Standard Operation Manual, Mounting Clamps, Screws, Fuses, Warranty Certificate.
Optional Calibration Certificate Traceable to NPL

ORDERING INFORMATION

Available Models The Models available as standard products in the Series 2317N are listed below along with their standard options.

Model No	No of Inputs	Display Size	Input Proc	Output Options	Power Options	Enclosure Options	Encl Depth
23170	One	3½,12mm	A,V	I,A	A,B,C,D	C,D,E,F	150 mm
23171	One	3½,12mm	A,V	I,A,B	A,B,C,D	C,D,E,F	200 mm
23172	Two	3½,12mm	A,V	I,A,B	A,B,C,D	D,E,F	250 mm
23173	One	4½, 8mm	A,V	I,A,B	A,B,C,D	D,E	200 mm
23174	One	Custom	A,V,G	I,A,B,C	A,B,C,D	A,B,C,D,E,F,H,L,G	250 mm

Ordering Code To Order an instrument of your choice, first identify the Models which satisfy your alarm function requirements, then select a specific Model on the basis of Enclosure, No of Channels etc. You can completely specify your Choice by an ordering code in the following format

Model No.	Input Processing	Output Code	P.S. Code	Encl Code	Custom Feature
2317N	X	X	X	X	See Note

Note: The Custom Feature is absent for standard options & specifications as given in the above description. Deviations in any specification or option are emphasised by letter 'G' against the Option Code. For Custom requirements the custom feature is to be added to the Ordering Code.

Example 1 Specify **23170AAAE** to order 4-20 mA input DigiMate 23170 with 24VDC transmitter power supply, one HI/LO Alarm, operating on 230VAC, 50Hz and housed in an Industry Standard enclosure of 72(W) x 144(H) x 150(D) mm.

Example 2 Specify **23174AAAGG { Where G = Enclosure of 210(W) x 115(H) cutout, 200 mm length and a display of 25mm LEDs}** to order 4-20 mA input DigiMate 23174 with 25mm display, 24V DC transmitter power supply, one HI/LO Alarm, operating on 230 VAC, 50Hz housed in a custom enclosure of 210(W) x 115(H) x 200(D) mm.