

Zimmer R312 DIGITAL PANEL METERS



APPLICATION :

The digital panel meters Zimmer DPM have been designed for industrial applications, which frequently require precise and on-site adjustment of the display range. It can be used in industrial automation and for laboratory uses.

SALIENT FEATURES :

- 3/64 DIN Indicator
- Screw terminal connectors for easy installation
- LCD: 3-1/2 digit 0.5" high LCD display with optional negative image, bright red backlighting
- LED: 3-1/2 digit, 0.56" high display
- Limited range display scaling
- User selectable decimal point
- Span adjustment and offset adjustment through potentiometer

TECHNICAL SPECIFICATION

Measuring Ranges

1. DC Voltage

Range	Resolution	Input Impedance	Max Overload Allowed	Display Type			Display Spam
				Non-Backlight (LCD)	Negative Image Red (LCD)	Red (LED)	
200mV	100µV	10M?	100VDC	Non-Backlight (LCD)	-	-	1999
20V	10mV	10M?	250VDC	Non-Backlight (LCD)	Negative Image Red (LCD)	Red (LED)	1999
200V	10mV	9.9M?	250VDC	Non-Backlight (LCD)	-	Red (LED)	1999

2. AC/DC TRMS Current

Range	Resolution	Voltage Drop	Max Overload Allowed	Display Type		Display Spam
				Non-Backlight (LCD)	Negative Image Red (LCD)	
5A AC	10mA	50mVAC	6A AC	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 10/100/1000
5A AC	10mA	50mVAC	6A AC	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 20/200
5A AC	10mA	50mVAC	6A AC	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 30/300
5A AC	10mA	50mVAC	6A AC	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 50/500
5A DC	10mA	50mVDC	6A DC	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 100

3. AC TRMS Voltage

Range	Resolution	Voltage Drop	Max Overload Allowed	Display Type		Display Spam
200V	100mv	1M?	200VAC	Non-Backlight (LCD)	Negative Image Red (LCD)	1999

4. Frequency

Range	Resolution	Display Type		Display Spam
20-200Hz	0.1HZ	Non-Backlight (LCD)	Negative Image Red (LCD)	20 to 199.9

5. DC Process

Range	Resolution	Voltage Drop	Max Overload Allowed	Display Type		Display Spam
4 to 20mA	0.10%	200mVdc	60mA	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 100%
0 to 10Vdc	0.10%	Input Impedance 10M?	250VDC	Non-Backlight (LCD)	Negative Image Red (LCD)	0 to 100%
0 to 100Vdc	0.10%	10M?	250VDC	-	Negative Image Red (LCD)	1999

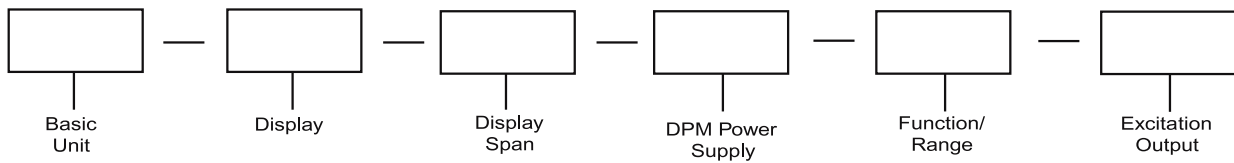
TECHNICAL SPECIFICATION

Specifications		3-1/2 Digit Display	
		LCD	LED
Display	Type	7 Segment	
	Height	0.5" (12.7mm)	0.56" (14.2mm)
	Decimal point (Selectable)	3 position	3 position
	Over range Indication	Most significant digit = "1"	Most significant digit = "1"
	Backlighting	Optional negative image, Red Backlight	NA
	Polarity	Auto with "-" indication; "+" implied	
Power Requirements	AC Volt	85-250VAC @ 40-440Hz	
Power Consumption		4.0VA (2.4W) Max	3.6VA (2.16W) Max
Isolation		250Vrms Max	
Accuracy @ 25°C	200HZ	±0.2% of input ± 0.2Hz	Not Available
	DC V	±(0.1% of reading ±1count)	±(0.1% of reading ±1count)
	AC TRMS V & A	±(0.5% of reading + 5 count) (50Hz - 2KHz)	±(0.5% of reading + 2 count) (50Hz - 5KHz)
	DC Process	±(0.2% of reading ± 1 count)	
Excitation Current		25mA (Maximum)	
Environmental	Operating Temperature	0 to 55°C	
	Storage Temperature	-10 to 60°C	
	Relative Humidity	0 to 85% non condensing @ 40°C	
	Temperature Coefficient	0.2% of input ± 0.5 digits/°C	
Warm-up Time		Less than 20 minutes	
Input Level (Frequency Meter)		500mV to 270VRMS @1.0M ? or 5V to 24V SquareWave (DC Offset = 2Vmax)	Not Available
Mechanical	Bezel	0.95" * 2.84" (24mm * 72mm)	
	Depth	2.36" (60mm)	
	Panel Cutout	0.88" * 2.68" (22.2mm * 68mm)	
	Case Material	94-0, UL-rated, glass-filled thermoplastic	

Ordering Information

RISH DPMs can be configured by making an entry in each section.

Example: R312-0-12-0-71-0



Ordering information	Ordering Code
Basic Unit	
3-1/2 Digit	R312
Display	
Non Backlight (LCD)	0
Negative Image Red (LCD)	1
Red LED	2
Display Span	
10	0
20	1
30	2
50	3
100	4
200	5
300	6
500	7
1000	8
1999	9
19999	10
20 to 199.9	11
0 to 100%	12
DPM Power Supply	
85-250VAC	0
Function/Range	
200DCmV	11
20DCV	13
200DCV	14
5ACA TRMS	43
5DCA TRMS	47
200VAC TRMS	34
4-20DCmA (DC Process)	71
0-10DCV (DC Process)	73
0-100DCV (DC Process)	74
20-199.9Hz RMS	81

20-199.9Hz Sq. Wave	83
Excitation Output (N/A w/Frequency)	
None	0
12 DCV @ 25mA	1
24 DCV @ 25mA	2

ZIMMER INSTRUMENTS

G-42521, Str.26, Ballindamm, Hamburg, Germany
 Tel.: +49 40 810 26 67 / 7201252
 Fax: +49 40 7201253
 Email: info@zimmer-instruments.com
www.zimmer-instruments.com

