Technical Data Sheet

Beta G1

LCD



LCD with Backlit



Beta G1 is the digital panel meter designed for industrial applications, which frequently requires precise and on-site adjustment of the display range.

Special Features

- 3/64 DIN Indicator
- LCD: 3-1/2 digit 0.5″ high LCD display (non backlit or -ve image red) bright red backlighting
- Limited range display scaling
- Span adjustment and offset adjustment through potentiometer

Application

Beta G1 The digital panel meters 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.

Technical Specifications

Measuring Ranges

DC Voltage

Range	Resolution	Input Impedance	Max Overload Allowed	DisplayType		Display Span
200mV	100µV	10MΩ	100VDC	Non Backlight (LCD)	-	1999
20V	10mV	10MΩ	250VDC	Non Backlight (LCD)	Negative Image Red (LCD)	1999
200V	100mV	9.9MΩ	250VDC	Non Backlight (LCD)	Negative image red (LCD)	1999

AC/DC TRMS Current

Range	Resolution	Voltage Drop	Max Overload Allowed	Display Type		Display Span
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

AC TRMS Voltage

Range	Resolution	Input Impedance	Max Overload Allowed	Display Type		Display Span
200V	100mV	1MΩ	200VAC	Non Backlight (LCD)	Negative Image Red (LCD)	1999

Frequency

Range	Resolution	Display Type		Display Span
20-199.9Hz	0.1Hz	Non Backlight (LCD)	-	20 to 199.9

DC Process

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

Technical Specifications

Display	LCD
Type	7 Segment
Height	0.5" (12.7mm)
Decimal point (Selectable)	3 position
Overrange Indication	Most significant digit = "1"
Backlighting	Optional negative image, Red Backlight
Polarity	Auto with "-" indication; "+" implied

Power Requirements

AC Volt	85-250V AC @ 40-440Hz

Power Consumption

4.0VA (2.4W) Max	2.5VA min / 4VA 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)

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

Display Scaling

1.Span Adjustment

Beta G1 indicators havelimited range coarse and fine adjustments for display scaling. There are no optional connections required for these to function. The meter can be scaled up to 2 times, or down to ½ the value of the input or a maximum reading of 1.999 which ever is lower.
Example: a 2 volt input has a maximum reading of 1.999 counts, so you can't double the 2 volts, but you can make 1 volt read 1.999.The fine calibration allows for an approximate range of 1% of the "coarse" calibration.

2.Offset Adjustment

Use coarse adjustment for offset. The offset can be scaled up or down approximately 250 counts.

DC Process

±(0.2% of reading ± 1 count)

Input Level (Frequency Meter)

500mV to 270VRMS @ 1.0MΩ or 5V to 24VSquare Wave (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

Product Code	BT32-	X	X	XX	X	00000000
Size	24X72	B				
LCD Color	Gray LCD		G			
	Red LCD		R			
Input Range	0-20mAD			02		
	4-20mAD			04		
	5AA			54		
	200mVD			0D		
	50mVD			OE		
	10VD			1B		
	20VD			1C		
	100VD			1J		
	200VD			1N		
	220VA			3T		
	200VA			3U		
	20-199.9Hz			05		
Power Supply	85-250U				Q	

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