

DIGITAL FREQUENCY COUNTER

4 FUNCTIONS 5 RANGES

Model - KM 3165

FEATURES :

- It is a high resolution multifunction intelligent Frequency Counter based on microprocessor technology.
- Frequency, period and equal-precision measurement
- Wide measuring range from 0.01 Hz to 2.4 GHz
- 3-step function selection, work state, unit and 8 - digit LED display.
- Continuous and adjustable gate time.
- Low frequency and other precision measurement.
- Input attenuation, AC / DC coupling selectable



ELECTRICAL SPECIFICATIONS : KM 3165

BASIC FUNCTION

1. Frequency Range	CH.A measuring range : 0.01Hz - 50 MHz	
	DC Couple 0.01 Hz to 100Hz	AC Couple 100Hz to 50MHz
Sensitivity	*AC* 100Hz - 50MHz 80m Vrms	*DC* 0.01 Hz - 1Hz 500m Vp-p, 1Hz - 100Hz 80m Vrms
Attenuator	X 1, X 20	
2. Frequency Range	CH.B measuring range : 50 MHz - 2.4 GHz	
Sensitivity	50MHz - 1.2GHz 80m Vrms	1.2GHz - 2.4GHz > 80m Vrms
Coupling	AC only	
Cyclic Measurement	CH. A measuring range : 0.02 S - 10S Sensitivity 80mVrms > 1S	
	CH. B measuring range : 0.5 nS - 0.02 S Sensitivity 500mVrms > 1S	
Cyclic Measurement Range	0.5 nS - 10 S	
Input Impedance	1M (CH. A); 50 (CH. B)	
Max. Safety Voltage	30V (DC / AC peak)(CH. A); 3V (CH. B)	
Basic Accuracy	± (2 x 10 ⁻⁵ + 3)	
Gate Time	Continuously variable, from 100ms to 10s.	
Display	8 digits 19 x 12.5 mm LED with steps, frequency, period, kHz/s and MHz/ms, indicator.	
Precision	Standard time error (t) x frequency (f) ± 1d	
Preheat Time	20 minutes	
Operating Temperature	0°C - 50°C, 10 - 90% R.H.	
Storage Temperature	-40°C - 60°C, 5 - 90% R.H.	
Short / Long Time Stability	Short : ± 3 x 10 ⁻⁶ / second Long : ± 2 x 10 ⁻⁶ / month	
Power Supply	AC 220V / 110V ± 10%, max. Power consumption 5W	
Dimension	270 x 215 x 100 mm	
Weight	Approx. 1.6 kg.	

RESOLUTION

Step	Coupling	Frequency Range	Resolution	
			Gate Time Min.	Gate Time Max.
1	AC	1GHz - 2.4 GHz	1kHz	100Hz
1	AC	50MHz - 1 GHz (no including 1GHz)	1kHz	10Hz
2	AC	2MHz - 50MHz	1kHz	10Hz
3	AC	100Hz - 2MHz	10Hz	0.1Hz
3	DC	0.01Hz - 100Hz (no including 100Hz)	0.001Hz	

All Specifications are subject to change without prior notice