

## 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 ≤80mVrms "DC" 0.01 Hz - 1Hz ≤500mVp-p, 1Hz - 100Hz ≤80mVrms	
Attenuator	X 1, X 20	
2. Frequency Range	CH.B measuring range : 50 MHz ~ 2.4 GHz	
Sensitivity	50MHz ~ 1.2GHz ≤80mVrms 1.2GHz ~ 2.4GHz > 80m Vrms	
Coupling	AC only	
Cyclic Measurement	CH. A measuring range : 0.02 μS~10S Sensitivity 80mVrms > 1S	
	CH. B measuring range : 0.5 nS ~ 0.02 μS Sensitivity 500mVrms > 1S	
Cyclic Measurement Range	0.5 nS ~ 10 S	
Input Impedance	1MΩ(CH.A); 50Ω(CH. B)	
Max. Safety Voltage	30V (DC / AC peak)(CH. A); 3V (CH. B)	
Basic Accuracy	± (2 x 10 <sup>-5</sup> + 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 <sup>-3</sup> / second Long : ± 2 x 10 <sup>-3</sup> / 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	