FD-252, FD-250, FD-130



The FD-250 digital frequency counter is an instrument designed to measure frequencies ranging from 20 Hz to 160 MHz through a high-impedance input.

The FD-252 digital frequency counter is designed for application that require a higher frequency range. For that purpose the instrument is equipped with a second input for measurement up to 2.4 GHz with an impedance of 50 Ω.

Both have an excellent frequency sensitivity and three selectable gate time fixed values: 2 sec., 0.2 sec., and 20 msec., thus enabling the user to obtain an optimum ratio between the measurement time and the resolution. In addition, both have a selectable band-pass filter at input A. In this way it is possible to measure low-frequency signals, removing interferences in the measure.

They are equipped with an 8 digit L.E.D. display which facilitates frequency reading.

SPECIFICATIONS	FD-250	FD-252	FD-130
Input A Frequency range Maximum measurement frequency Sensitivity Input impedance Maximum input voltage Selectable low pass filter	20 Hz to 160 MHz Selectable at 20 MHz or 160 MHz From 20 Hz to 80 MHz < 15 mV rms. From 80 MHz to 160 MHz < 25 mV rms 1 MΩ // 35 pF 250 V AC (up to 100 kHz) 50 kHz (-3 dB), range selector at 20 MHz		5 Hz to 25 MHz Selectable at 5 Hz to 25 MHz From 10 Hz to 20 MHz < 15 mV rms 1 MΩ // 25 pF 30 V AC (up to 100 kHz) 5 KHz
Input B Frequency range Sensitivity Input impedance Maximum input voltage		100 MHz to 2,4 GHz From 100 MHz to 1 GHz < 10 mV From 1 GHz to 2.4 GHz < 50 mV 50 Ω 100 V DC or peak AC (50 Hz) RF + 18 dBm	20 MHz to 1.3 GHz From 20 MHz to 700 MHz < 10 rms From 700 MHz to 1.3 GHz < 50 rms 50 Ω 30 V DC
General Accuracy	± 1 count ± time base accuracy		
Standard time base Frequency Temperature coefficient	10 MHz 0.2 ppm / ºC from 15 to 45 ºC		0.3 ppm / ºC from 18 to 28 ºC
Optional time base (TCXO) (FD-250/1 or FD-252/1 option) Frequency Stability Ageing at constant temperature Display Selectable gate times	10 MHz ± 1 ppm from 0 to 50 ºC ± 0.5 ppm / month, ± 1 ppm / year 8 L.E.D.digits 2 s - 0.2 s - 20 ms	2 s - 0.2 s - 20 ms (Input A) 4 s - 0.4 s - 40 ms (Input B)	± 2 ppm from 0 to 50 ºC <± 5 ppm / year 8 L.C.D.digits 0.1 s, 1 s and 10 s
Resolution 20 Hz to 20 MHz 20 MHz to 160 MHz 100 MHz to 2.4 GHz (FD-252)100 Hz	1 Hz - 10 Hz - 100 Hz (depending on gate times) 10 Hz - 100 Hz - 1 kHz (depending on gate times) - 1 kHz - 10 kHz (depending on gate times)		Input A from 5 Hz to 25 MHz Resolution 0.0001 Hz to 10 Hz Input B from 20 Hz to 1.3 GHz Resolution 1 Hz to 1 KHz
Power supply Mains voltage Consumption Battery	110-125-220-230-240 V AC / 50-60 Hz 10 W		9 V
Mechanical features Dimensions Weight	W. 212 x H. 102 x D. 241 mm 1.4 kg		W. 81 x H. 178 x D. 30mm 190 g without battery