

FG300 series DDS Function Generators

digimess® concept

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The **digimess®** FG300 series are general purpose Direct Digital Synthesis (DDS) function generators with frequencies to 3MHz (FG303) and 8MHz (FG308). Frequency setting is by keypad entry or rotary control and the combination of soft touch buttons and rotary controls for the remaining features result in a modern and easy to use instrument. These versatile generators have a 6 digit frequency display for internal or external signals and a 4 digit output amplitude display. The comprehensive specification also includes an output on/off switch and a variable TTL/CMOS amplitude control. Further features include LED indicators for frequency, amplitude and attenuation ranges as well as the selected waveform shape.

Specification

FREQUENCY		TTL amplitude	≥3Vpp
Frequency range (FG303)	Sine 0.1Hz to 3MHz Square 0.1Hz to 2MHz Triangle 0.1Hz to 1MHz	TTL fan out	20 TTL loads
Frequency range (FG308)	Sine 0.1Hz to 8MHz Square 0.1Hz to 2MHz Triangle 0.1Hz to 1MHz	CMOS amplitude	3.5 to 13.5Vpp
Resolution	100mHz -6	DISPLAYS	
Stability	±1 x 10 ⁻⁶	Frequency readout	6 digit LED
Error	±5 x 10 ⁻⁶	External frequency range	10Hz to 60MHz
Accuracy	±20ppm	External voltage range	0.2V to 20V -4
OUTPUT		Error	±1 x 10 ⁻⁴
Waveforms	Sine, Square, Triangle, TTL/ CMOS	Voltage readout	4 digit LED
Output level	20mV to 20Vpp (no load)	GENERAL	
Attenuation	0dB, -40dB	Input voltage	220Vac ±10% 50Hz ±5%
Output impedance	50Ω ±10%	Weight	Approx 1.5kg
DC offset	±10V (no load)	Size W x H x D	265(W) x 110(H) x 340(D) mm
Duty cycle	20% to 80%	Temperature	Operating 0°C to 40°C Storage -20°C to 70°C
WAVEFORMS		Humidity	Up to 75%
Sine distortion	<0.6% 1kHz	ORDERING INFORMATION	
Triangle linearity	≥98% 100mHz to 100kHz ≥95% 100kHz to 1MHz	HUC62-01 FG303	3MHz function generator
Square rise and fall time	<30ns	HUC62-02 FG308	8MHz function generator
		Accessories supplied	Operators manual BNC test lead Mains lead