ATTEN ATF20B DDS Signal Function Waveform Generator 20MHz 100MSa/s

Description:

ATFxxB series Function generator uses Direct Digital Synthesis (DDS)technology. Its outstanding performance and system features make it a perfect solution for your testing requirement. The simplified and optimized design of the front panel and dual-language (English/Chinese)TFT display interface make your testing much easier for operation and observation. Additionally, the extendable optional functions can also improve your system characteristics.

Features:

- Direct Digital Synthesis(DDS) technology, 2 independent output channels
- 3.5-inch TFT LCD display
- High Frequency Resolution: full-range resolution is 40 MHz
- Store 40 sets of the user parameters and recall
- 32 kinds of standard or build-in fixed waveforms
- Minimum stable output waveform: 1mV(50)
- Multiple modulation functions: FM, FSK, ASK, PSK
- Frequency sweep, amplitude sweep and burst functions
- Count the frequency, period, amplitude RMS value or peak-to-peak value
- Over-voltage, over-current, output short-circuit and reverse voltage protections
- High reliability: use VLSI components and surface mount technology
- Power Amplifier: optional part, maximum output power up to 7W
- Optional configurations: RS232 interface, Frequency Counter, Power Amplifier

General Characteristics:

- Power Supply: AC220V (1±10%) / AC110V (1±10%) (Pay attention to the voltage selection on rear panel)
- Frequency:50Hz (1±5%)
- Power Consumption: < 45VA
- Operating Temperature: 0°C to +40°C
- Operating Humidity: 80% R.H
- Operation Characteristics: Keypad operation and rotary knob operation
- Dimensions: 415mm x 295mm x 195mm
- Display: TFT display, 320*240
- Weight: 3.5kg

Output A Characteristics:

WAVEFORM	Waveform type 32 kinds, such as Sine, Square, Triangle, Pulse etc Waveform length 1024 points Sample rate 100 MSa/s Vertical resolution 8 bits

	Harmonic rejection (sine) 40dBc (< 1MHz), 35dBc (1MHz~20MHz)
	Total distortion(sine) 1% (20Hz ~ 200kHz)
	Rise/fall time of square 35ns
	Overshoot 10%
	Square duty cycle 1% ~ 99%
	Frequency range 40mHz ~ max. frequency(sine) , 40mHz ~1MHz(other waveforms)
	Frequency Resolution 40mHz
FREQUENCY	Frequency Accuracy ± (50ppm+ 40mHz)
	Amplitude range :2mVpp ~ 20Vpp 40mHz~10MHz (high impedance)
	2mVpp ~ 15Vpp 10MHz~15MHz (high impedance)
	2mVpp ~ 8Vpp 15MHz~20MHz (high impedance)
	Amplitude Resolution :20mVpp (amplitude>about 2 Vpp),
	2mVpp (amplitude<about 2Vpp)
	Amplitude Accuracy ± (1%+2mVrms)(high impedance,1kHz,sine)
	Amplitude Flatness ±5% (<10MHz), ±10% (>10MHz)
	Amplitude stability ± 0.5%/ 3 hours
AMPLITUDE	Output impedance 50
	Offset Range ±10V (high impedance, attenuation 0dB)
	Offset Resolution 20mVdc
OFFSET	Offset accuracy ±(1% + 20mVdc)
	Sweep Type Linear sweep or frequency or amplitude
	Sweep range free to set the start and stop points
	Sweep step larger than any figure of the resolution
	Sweep rate 10ms~60s/step
SWEEP	Sweep mode Up, Down, Up-Down, Single
	FSK free to set the carrier and hop frequency
	ASK free to set the carrier and hop amplitude
	PSK Hop Phase: 0 ~ 360°, Max. resolution: 1°
SHIFT KEYING	Alternate rate 10ms ~ 60s
	Burst count 1~65000 cycles
BURST	Burst mode internal, external, single

TTL Output Characteristics:

	Waveform rise/fall time 20ns (square)
TTL	Frequency 40mHz ~ 1MHz
	Amplitude TTL,CMOS compatible, low level <0.3V,high level >4V