



INTRODUCTION

The Metravi DDS-1005 and DDS-1010 DDS Function Generators are multi-function devices, which combine Arbitrary Waveform Generation and Function Generation.

The products introduce Direct Digital Synthesiser (DDS) technology to provide stable, precise, pure and low distortion signal.

The user-friendly interface design and panel layout bring exceptional user experience and provide more alternative solutions for users.

FEATURES

- 4 inch, high-resolution (480×320 pixels) TFT LCD display
- Advanced DDS technology
- Max. Sample rate: 125 MSa/s
- Frequency resolution: 1 μ Hz
- Vertical resolution: 14 bits
- 8192 waveform record length
- Abundant waveform output: 5 basic waveforms and 45 built-in arbitrary waveforms output
- Exponential rise, Exponential fall, $\sin(x)/x$, Staircase, etc.
- 45 built-in waveforms and user defined arbitrary waveform
- Abundant modulation functions along with output liner/logarithm sweep and pulse string waveform ()
- Standard interface: USB (type B) connector

*Technical Specifications & Appearance are subject to change without prior notice

TECHNICAL SPECIFICATIONS

Model	DDS-1005	DDS-1010
Channel	Single + Trigger	
Frequency Output	5 MHz	10 MHz
Sample Rate	125MS/s	
Vertical Resolution	14 bits	
Waveform		
Standard Waveform	Sine, Square, Pulse, Ramp and Noise	
Arbitrary Waveform	Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave and others, total 45 built-in waveforms and user-defined arbitrary waveform	
Frequency (Resolution 1μHz)		
Sine	1μHz - 5MHz	1μHz - 10MHz
Square	1μHz - 5MHz	
Pulse	1μHz - 5MHz	
Ramp	1μHz - 1MHz	
Noise	5MHz (-3dB) (Typical)	
Arb	1μHz - 5MHz	
Amplitude		
Amplitude	1m Vpp - 12.5 Vpp (50Ω), 1m Vpp - 25 Vpp (High Impedance)	
Resolution	1m Vpp, or 4 digits	
DC Offset Range (AD+DC)	±6.25V (50Ω), ±12.5V (High Impedance)	
DC Offset Range Resolution	1mV or 4 digits	
Load Impedance	50Ω (Typical)	
Arbitrary Waveform		
Wave Length	2 pts to 8K pts	
Sample Rate	125MS/s	
Vertical Resolution	14 Bits	
Non-Volatile Memory	64M Bytes	



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TECHNICAL SPECIFICATIONS

Model	DDS-1005	DDS-1010
Power Amplifier Module (Optional)		
Input Impedance	50 kΩ	
Max Input Voltage	2.2 Vpp	
Output Impedance	<2 Ω	
Max Output Voltage	22 Vpp	
Output Slew Rate	10 V/us	
Max Output Power	10 W	
Gain	X 10	
Offset	<7%	
Bandwidth (At Full Power)	DC 100kHz	
Input / Output		
Display	4 inch (480 x 320 Pixels) LCD	
Type	External Reference Clock Input	
Communication Interface	USB Device	
Mechanical		
Dimension (W x H x D)	235 x 110 x 295 (mm)	
Device Weight	3.00 kg	



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