4 in 1 Universal Instrument: Function Generator, Power Supply, Frequency Meter, Digital Multimeter

OUI4001

- DDS function generator: built-in Linear / logarithmic frequency sweep function.
- With DC offset function, duty adjustable.
- Power supply: four channels of output, one adjustable (0 ~ 30 V/0 ~ 3 A), three fixed (5 V/2 A, ±15 V/1 A).
- Overload function and short-circuit functions.
- Frequency meter: count-down technology; up to 2.7 GHz.
- DMM: 50 kinds of measurement functions regarding voltage, current, resistance, capacitance, etc.
- RS-232 interface.

Model	OUI4001		
Function Generator			
Output Waveform	Sine, square, triangle, pulse, TTL		
Frequency Range	1 Hz ~ 10 MHz		
Output Impedance	50 Ω±10%/600 Ω±10%		
Attenuation	-20 dB		
Output Amplitude Range	100 mVpp～20 Vpp (High impedance)		
DC Offset	-10 V ~ +10 V		
Sine Wave Distortion	<1% (at 1 kHz)		
Square Wave Symmetry	<3% (at 1 kHz)		
Square Wave Rise/Fall Time	<150 ns (5 Vpp, 1 MHz) <50 ns (5 Vpp, 1 MHz)		
Duty Cycle Adjustment	15% ~ 85%		
Triangle Wave Linearity	≤100 kHz: <1%		
TTL Output Level	>3 V		
Sweep Range	1 Hz ~ 10 MHz		
Sweep Type	Linear, logarithmic		
Power Supply			
Ch1			
Output Voltage	0 ~ 30 V		
Output Current	0 ~ 3 A		
Ripple	±1 mVrms		
Load Effect	0.1%＋40 mV		
Source Effect	0.1%＋20 mV		
Max. Output Current	3.3 A		
Display Accuracy	Voltage ±1%＋2 words; Current ±2%＋2 words		
Ch2			
Output Voltage	fix ±15 V		
Output Current	1 A		
Ripple	<2 mVrms		
Load Effect	0.1%＋50 mV		
Source Effect	0.1%＋30 mV		
Max. Output Current	1.2 A		
Ch3			
Output Voltage	fix 5 V		
Output Current	2 A		
Ripple	<1 mVrms		
Load Effect	0.1%＋70 mV		
Source Effect	0.1%＋30 mV		
Max. Output Current	2.2 A		
Frequency Counter			
Freq Measurement Range	CH-A 1 Hz～100 MHz CH-B 100 MHz～2.7 GHz		
Input Sensitivity	CH-A 40 mVrms sine wave or 100 mVpp; CH-B 40 mVrms sine wave or 100 mVpp		
Max. Input Voltage	CH-A 35 Vpp CH-B 3 Vpp		
Input Impedance	CH-A 1 mΩ CH-B 50 Ω		
Resolution	[（$\pm 1\times10^{-7}$/s）× measured signal frequency]/ Strobe time		
Digital Multimeter			
Dc Voltage Measurement	Range	Resolution	Accuracy
	80 mV	1 μV	± (0.3% +10 words)
	800 mV	10 μV	± (0.05% +10 words)
	8 V	0.1 mV	
	80 V	1 mV	
	800 V	10 mV	± (0.08% +10 words)
True RMS Of AC Voltage	80 mV	1 μV	± (0.8% +50 words) (50 Hz ~ 20 kHz) ± (6% +50 words) (20 kHz ~ 50 kHz)
	800 mV	10 μV	± (0.8% +50 words) (50 Hz ~ 20 kHz)
	8 V	0.1 mV	± (5% +50 words) (20 kHz ~ 50 kHz)
	80 V	1 mV	± (5% +50 words) (50 Hz ~ 1 kHz)
	800 V	10 mV	
Dc Current	80 mA	1 μA	± (0.2%g+10 words)
	800 mA	10 μA	
	8 A	0.1 mA	± (0.8% +10 words)
	20 A	1 mA	± (1.5% +10 words)

True RMS of AC Current	80 mA	1 µA	± (1% +20 words)
	800 mA	10 µA	
	8 A	0.1 mA	± (1.5% +20 words)
	20 A	1 mA	± (2.0% +20 words)
Resistor	Range	Resolution	Accuracy
	800 Ω	0.01 Ω	± (0.2% +5 words)
	8 kΩ	0.1 Ω	
	80 kΩ	1 Ω	
	800 kΩ	10 Ω	
	8 mΩ	100 Ω	± (0.3% +10 words)
	80 mΩ	1 kΩ	± (1.5 % +10 words) (0 ~ 40 mΩ) ± (3.0% +10 words) (40 MW ~ 80 MW)
Frequency	99.999 Hz	0.00 1 Hz	± (0.05% +5 words)
	999.99 Hz	0.0 1 Hz	
	9.9999 kHz	0. 1 Hz	
	99.999 kHz	1 Hz	
	999.99 kHz	10 Hz	
	8.0000 MHz	100 Hz	
	10.0 MHz	100 Hz	± (0.1% +5 words)
	100.0 MHz	1 kHz	
	1000.0 MHz	10 kHz	
Capacitor	1 nF	0.1 pF	± (5.0% +50 words)
	10 nF	1 pF	
	100 nF	10 pF	
	1 µF	100 pF	
	10 µF	1 nF	
	100 µF	10 nF	
Diode	3.000 V	0.001 V	± (3.0% +5 words)
Square Wave Output	Output	Description	
	Amplitude	3 V approx.	
	Frequency	0. 5 Hz ~ 5 kHz	
	Duty cycle	1% ~ 99%	
Physical characteristics			
Dimensions	165 mm × 370 mm × 360 mm		
Quality	12.5 kg approx.		
DDS Function Generator			
Frequency can be displayed directly via keys			
Power Supply			
One output adjustable with stable voltage & current. The both states can be switched automatically			
It use current limit protection and the limited point can be adjusted arbitrarily			
Frequency meter			
Use micro-processing technology			
It has low-pass filter and attenuator in pre-circuit			
DMM			
With multi-display including main & device, analog bar, unit etc.			
Backlight display, auto-refresh to maintain data			