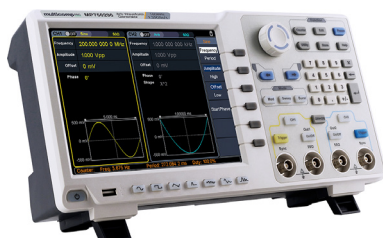




EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

**RoHS
Compliant**



Features

- Max 160MHz frequency output
- Max 1.25GS/s sample rate, and 1μHz frequency resolution
- Vertical Resolution :14 bits, max 1M arb waveform length
- Comprehensive waveform output : 6 basic waveforms, and 152 built-in arbitrary waveforms
- Comprehensive modulation functions : AM, FM, PM, FSK,
- 3FSK, 4FSK, PSK, OSK, ASK, BPSK, PWM, Sweep, and Burst
- High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
- SCPI, and LabVIEW supported
- 8 inch (800 × 600 pixels) multi-touch screen

Specification Table

Characteristics	Part Number		
	MP750290	MP750289	MP750288
Channel	2		
Frequency Output	160MHz	120MHz	80MHz
Sample Rate	1.25GSa/s		
Vertical Resolution	14 bits		
Waveform			
Standard Waveform	Sine, Square, Pulse, Ramp, Noise, and Harmonic		
Arbitrary Waveform	Exponential rise, exponential fall, sin(x)/x, step wave, and others, total 152 built-in waveforms, and user-defined arbitrary waveform		
Frequency (resolution 1μHz)			
Sine	1μHz - 160MHz		1μHz - 80MHz
Square	1μHz - 50MHz		1μHz - 30MHz
Pulse	1μHz - 25MHz		
Ramp	1μHz - 5MHz		
Harmonic	1μHz - 80MHz		1μHz - 40MHz
Noise	120MHz (-3dB, typical)		
Arbitrary Waveform	built-in waveform: 1uHz - 15MHz user-defined waveform: 1uHz - 50MHz		
Accuracy	±1ppm, 0°C - 40°C		
Amplitude			
Into 50Ω load	1mVpp - 10Vpp (≤40MHz); 1mVpp - 5Vpp (≤80MHz) 1mVpp - 2.5Vpp (≤120MHz); 1mVpp - 1Vpp (≤250MHz)		
Into open circuit, or high-Z	2mVpp - 20Vpp (≤40MHz); 2mVpp - 10Vpp (≤80MHz); 2mVpp - 5Vpp (≤120MHz); 2mVpp - 2Vpp (≤250MHz)		
Accuracy	±(1% of setting + 1mVpp) (typical, 1kHz sine, 0V offset)		
Resolution	1mV or 4 digits		
Load Impedance	50Ω (typical)		

Characteristics		Part Number		
		MP750290	MP750289	MP750288
DC Offset	Range (50Ω)	±(5 Vpk - Amplitude Vpp/2)		
	Range (open circuit, high-Z)	±(10 Vpk - Amplitude Vpp/2)		
	Accuracy	±(1% of setting + 1mV + Amplitude Vpp x 0.5%)		
	Resolution	1mV or 4 digits		
Sine Wave Spectrum Purity				
Harmonic Distortion (typical (0dB))		DC - 1MHz: <-65dBc 1MHz - 10MHz: <-60dBc 10MHz - 120MHz: <-50dBc 120MHz - 250MHz: <-45dBc		
Total Harmonic Distortion		<0.05%, 10Hz to 20kHz, 1Vpp		
Spurious (non-harmonic) (typical (0dB))		≤10MHz: <-70dBc >10MHz: <-70dBc + 6dB/ octave		
Phase Noise (typical (0 dBm, 10 kHz deviation))		10MHz: ≤-110dBc/Hz		
Square				
Rise / Fall Time		<5ns		
Overshoot		<3%		
Duty Cycle		50.0% (fixed)		
Jitter (rms)		300ps + 100ppm		
Pulse				
Pulse Width		12ns - 996875s		
Rise / Fall Time		≥7ns		
Overshoot		<3%		
Jitter (rms)		300ps + 100ppm		
Ramp				
Linearity		≤1% of peak output (typical, 1kHz, 1 Vpp, 50% symmetry)		
Symmetry		0% to 100%		
Harmonic				
Harmonic Order		≤16		
Harmonic Type		even, odd, all, user		
Harmonic Amplitude		[Could be set for all the harmonics]		
Harmonic Phase				
Arbitrary				
Waveform Length		2 points - 1M points		
Vertical Resolution		14 bits		
Minimum Rise/Fall Time		<7ns		
Jitter (rms)		3ns		

Characteristics	Part Number		
	MP750290	MP750289	MP750288
Modulation			
Type	AM, FM, PM, PWM, FSK, 3FSK, 4FSK, PSK, OSK, ASK, BPSK, sweep, and burst		
AM			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	internal / external		
Modulating Waveform	sine, square, ramp, noise, and arbitrary		
Depth	0.0% - 100.0%		
Modulating Frequency	2mHz - 100kHz		
FM			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	internal / external		
Modulating Waveform	sine, square, ramp, noise, and arbitrary		
Modulating Frequency	2mHz - 100kHz		
PM			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	internal / external		
Modulating Waveform	sine, square, ramp, noise, and arbitrary		
Phase Deviation	0° - 180°		
Modulating Frequency	2mHz - 100kHz		
PWM			
Carrier Waveform	pulse		
Source	internal / external		
Modulating Waveform	sine, square, ramp, noise, and arbitrary		
Width Deviation	0 ~ minimum (pulse duty ratio, 100% - pulse duty ratio)		
Modulating Frequency	2mHz - 100kHz		
FSK / 3FSK / 4FSK			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	Internal / external		
Modulating Waveform	square with 50% duty cycle		
Key Frequency	2mHz - 1MHz		
PSK			
Carrier Waveform	Sine, square, ramp, and arbitrary (except DC)		
Source	Internal / external		
Modulating Waveform	square with 50% duty cycle		
Key Frequency	2mHz - 1MHz		
OSK			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	internal		

Characteristics	Part Number		
	MP750290	MP750289	MP750288
Oscillation Time	square with 50% duty cycle		
Key Frequency	2mHz - 1MHz		
ASK			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	internal / external		
Modulating Waveform	square with 50% duty cycle		
Key Frequency	2mHz - 1MHz		
BPSK			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Source	internal		
Modulating Waveform	square with 50% duty cycle		
Key Frequency	2mHz - 1MHz		
Sweep			
Carrier Waveform	sine, square, ramp, and arbitrary (except DC)		
Type	linear, and log		
Sweep Time	1ms to 500s, ±0.1%		
Trigger Source	internal, external, and manual		
Burst			
Carrier Waveform	sine, square, ramp, pulse, and arbitrary (except DC)		
Burst Count	1 to 50,000 period, infinite, gating		
Internal Period	10 ns - 500 s		
Gated Source	external trigger		
Frequency Counter			
Function	frequency period, +width, -width, +duty, and -duty		
Frequency Range	100mHz - 200MHz		
Frequency Resolution	7 digits		
Input / Output			
Display	8" 800 × 600 pixels touch screen LCD		
Type	frequency counter, external modulation input, external trigger input, external reference clock input / output		
Communication Interface	USB Host, USB Device, and LAN		
Warranty	03 years		

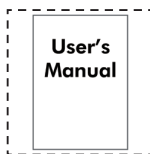
Accessories



Power Cord



CD Rom



Manual



USB Cable



Q9 Cable

Part Number Table

Description	Part Number
Waveform Generator, Arbitrary, Function, 160MHz, BPSK, Burst, FM, FSK, OSK, PM, PSK, PWM, Sweep	MP750290
Waveform Generator, Arbitrary, Function, 120MHz, BPSK, Burst, FM, FSK, OSK, PM, PSK, PWM, Sweep	MP750289
Waveform Generator, Arbitrary, Function, 80MHz, BPSK, Burst, FM, FSK, OSK, PM, PSK, PWM, Sweep	MP750288

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