



Digital Multimeter		
	HA-DMA512	HA-DMA612
Measuring quantity	d.c. voltage and current, a.c. voltage and current, resistance, capacity, frequency, temperature	
Additional measuring functions	reading range, auto range, diode test, continuity, null, tigger, save/read, math	
Safety	IEC61010-1: 2010, CAT I 1000V/CAT II 600V, Pollution level: 2	
Interface	USB, RS-232	
Power supply	115 V/230 V (1±10%), 50 Hz/60 Hz, 15 VA	
Dimensions & weight	260 × 106 × 375 mm, 3.0 kg	
Additional functions	<ul style="list-style-type: none"> • VFD display with high-brightness • True digits 5½ (HA-DMA512) and 6½ (HA-DMA612). • Reading rates up to 1000 readings per second. • True RMS measurement of AC voltage and current. <ul style="list-style-type: none"> • Built-in math operations. • Full measuring functions to meet user's test need. 	



Programmable DC power supply	
	HA-PSA3515
Output range	35 V / 15 A
Output power	500 W
Resolution	1 mV/ 1 mA
Accuracy	voltage: ≤± (0.05% + 10 mV) current: ≤± (0.2% + 50 mA) OVP: ≤± (0.5% + 0.5 V)
Interface	RS-232
Power supply	AC 115-230 V (1±10%)V, 50 (1±5%) Hz
Dimensions & weight	425 × 150 × 465 mm, 20 kg
Additional functions	<ul style="list-style-type: none"> • All digital controlled, output 1mV/1mA step. <ul style="list-style-type: none"> • High stability, low drift. • LED display the voltage/current and working status visually. • Intelligent temperature controlled fun with low noise. <ul style="list-style-type: none"> • Storage and recall function. • OVP (Over Voltage Protecion) function. • Keypad locked function to avoid the misoperation.



Synthesized Signal Generator

HA-GFA005

CHA		
Frequency range	sine: 1 μHz ... 500 MHz square: 1 μHz ... 80 MHz	
Sine output level	≤ 500 MHz	-127 dBm ... +13 dBm(-127 dBm ... -117 dBm typ.)
	≤ 1000 MHz	-110 dBm ... +13 dBm(-100 dBm ... -110 dBm typ.)
	≤ 1500 MHz	-105 Bm ... +10 dBm(-100 dBm ... -105 dBm typ.)
Modulation type	AM,FM, FSK, PSK	
CHB		
Frequency range	1 μHz ... 10 MHz	
Waveform type	Sine, Square, Ramp, Pulse, Sinc, Exp, Noise, DC	
Output amplitude	1 mVpp ... 10 Vpp(50 Ω), 2 mVpp ... 20 Vpp (High Z)	
GENERAL CHARACTERISTICS		
Interface	USB, RS-232	
Power supply	100 V a.c. ... 240 V, 50(1±10%)Hz, <40 VA	
Dimensions & weight	254 × 103 × 374 mm; 4.2 kg	
Additional functions	<ul style="list-style-type: none"> • Perfect combination of DDS and PLL techniques. <ul style="list-style-type: none"> • Frequency upper limits to 500 MHz. • Higher level of frequency accuracy, up to 1 ppm. <ul style="list-style-type: none"> • Communication interfaces: USB, RS-232. • 4 built-in fixed arbitrary waveforms: Exp, Sinc, Noise, DC. <ul style="list-style-type: none"> • Sweep and Burst function. 	

ORDERING CODES

HA-DMA512/612 ordering code:			
HA-DMA512 -	XX	X	X
HA-DMA612 -			
Version:			
standard	00		
custom-made*	XX		
Language:			
polish		P	
english		E	
other*		X	
Acceptance test:			
with an quality inspection certificate			1
with test certificate			2
acc. to customers request			X

HA-GFA005 ordering code:			
HA-GFA005-	XX	X	X
Version:			
standard	00		
custom-made*	XX		
Language:			
polish		P	
english		E	
other*		X	
Acceptance test:			
with an quality inspection certificate			1
with test certificate			2
acc. to customers request			X

HA-PSA3515 ordering code:			
HA-PSA3515 -	XX	X	X
Version:			
standard	00		
custom-made*	XX		
Language:			
polish		P	
english		E	
other*		X	
Acceptance test:			
with an quality inspection certificate			1
with test certificate			2
acc. to customers request			X

* - after agreeing with the manufacturer