



## Handheld Roughness Tester ART120

### | High Accuracy

**Type:** c Roughness tester

**Manufacturer:** Beijing Cap High Technology Co., Ltd.

**Tel:** +86 010 64717058

**Usage range:** Metal and nonmetal parts; suitable for roughness testing by mechanical processing and manufacturing, testing, inspection and other departments; roughness testing of flat surface, curved surface, grooves, holes and other complex work pieces.

**Advantage:** High accuracy to 0.001; 13 parameters for requirements of multiple testing values; Reliable circuit and software design to prevent motor stuck, overcome existing problems of domestic roughness testers and greatly extended usage life.

#### **Product Introduction**

##### **Outline:**

ART120 is new intelligent non-destructive testing instrument for metal and nonmetal work pieces surface roughness testing. It is suitable for mechanical processing and manufacturing industry, testing, inspection and other departments' multiple shapes of parts roughness testing. ART120 complies with international standard and is compatible with the standards of the United States, Germany, Japan, the United Kingdom and some other industrial countries. Measurement results can be displayed numerically or graphically on the LCD monitor, and can also be output to the printer.

##### **Features:**

Compatible with four standards of ISO, DIN, ANSI and JIS, for metal and nonmetal machined surface roughness testing;

Large number of process, multi-parameters of Ra, Rz, Rq, Rt;



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128\*64 dot matrix LCD display, digital / graphic display, bright and hassle free;  
High-speed DSP processor for data processing and computing, faster and higher accuracy;  
Reliable circuit and software design to prevent motor stuck;  
Built-in lithium ion chargeable battery and control circuit, high capacity, no memory effects;  
Remaining charge indicator, showing the charging process, you can keep abreast of the charge level;  
More than 20 hours' continuous working time;  
Large capacity of data storage, can store 100 sets of original data and waveforms;  
Real-time clock setting and display, convenient for data recording and storage;  
Automatic sleep, automatic switch off and other power-saving functions;  
Display of measurement information, menu prompt information, error messages, switch and other prompt descriptive information;  
Full metal shell design, firm, small, portable with high reliability;  
Optional of Chinese / English language;  
Can be connected to the printer;  
Optional curved surface sensors, hole sensors, measurement platforms, sensor sheaths, extension rod and other accessories.

**Working Environment:**

Temperature: 0°C-40°C;

Relative Humidity: <90%;

No vibration, no corrosive media around.

**Application Area:**

Production site, scientific research laboratories, factory metering chamber;

Machinery and processing industry, auto parts processing industry, metal processing equipments, machinery manufacturing industry, machine tool accessories;

Mould casting, precision manufacturing, hydraulic implement, rollers, axles, printing, textile machinery and medical machinery

**Technical Parameters:**

Name	Content	
Measuring Parameters	Ra, Rz, Rq, Rt, Rp, Rv, R3z, R3y, RzJIS, Rsk, Rku, Rsm, Rmr	
Measuring range	Ra, Rq	0.005μm~16μm
	Rz, R3z, Ry, Rt, Rp, Rm	0.02μm~160μm
	Sk	0~100%
	S, Sm	1mm
	tp	0~100%
Indication Accuracy	0.001	
Indication Error	±(7-10)%	
Repeatability	<6%	



Measuring profilometry	Roughness, waviness, original profilometry
Filter	RC、PCRC、Gauss、ISO13565
Sampling length (lr)	0.25, 0.8, 2.5mm
Assessment length (ln)	1L~5L Optional (L is the sampling length)
Maximum driving stroke length	17.5mm/0.71 inch
Minimum driving stroke length	1.3mm/0.052 inch
Internal storage capacity	30 sets of original datas
External input/output connector	USB
Power supply	Built-in Lithium ion battery/External power adapter
Dimensions(L×W×H)	140×52×48mm
weight	420g

**Standard Configuration:**

Name	Number
ART120 unit	1
Standard sensor pick-up	1
standard sample master (Multi-engraved lines)	1
Small Adjustable support	1
Power adapter	1
Instruction manual	1
Certificate	1
Warrantee card	1
Instrument case	1

**Optional accessories:** measuring test stand , other pick-ups

**Package Physical image :**



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