



The *Signet Si-Pin* spectrometer can detect the content of all metals, the instrument adopts American Si-pin detector, and the measurement accuracy is 0.025%. it can display the percentage purity of metals in real time every second, the instrument can distinguish 99.99 gold, 99.95 gold and 99.90 gold. Applicable to jewelry and precious metal testing centre, jewelry store, K gold jewelry factory, silver jewelry factory, gold recycling shop, precious metal enterprise and factory, etc.

PERIODIC TABLE OF ELEMENTS
(Characteristic X-Ray energy table)

																		13					14	15	16	17	18									
1	2												3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18								
IA	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A	16A	17A	18A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H 1.00794 Hydrogen	He 4.002602 Helium																			B 10.811 Boron	C 12.0107 Carbon	N 14.0067 Nitrogen	O 15.9994 Oxygen	F 18.998403 Fluorine	Ne 20.1797 Neon										
2	Li 6.941 Lithium	Be 9.012182 Beryllium																			Al 26.981538 Aluminum	Si 28.0855 Silicon	P 30.973762 Phosphorus	S 32.065 Sulfur	Cl 35.453 Chlorine	Ar 39.948 Argon										
3	Na 22.989769 Sodium	Mg 24.3050 Magnesium																			Ga 69.723 Gallium	Ge 72.64 Germanium	As 74.92160 Arsenic	Se 78.96 Selenium	Br 79.904 Bromine	Kr 83.798 Krypton										
4	K 39.0983 Potassium	Ca 40.078 Calcium	Sc 44.95592 Scandium	Ti 47.867 Titanium	V 50.9415 Vanadium	Cr 51.9961 Chromium	Mn 54.938045 Manganese	Fe 55.845 Iron	Co 58.933195 Cobalt	Ni 58.6934 Nickel	Cu 63.546 Copper	Zn 65.38 Zinc	Ga 69.723 Gallium	Ge 72.64 Germanium	As 74.92160 Arsenic	Se 78.96 Selenium	Br 79.904 Bromine	Kr 83.798 Krypton																		
5	Rb 85.4678 Rubidium	Sr 87.62 Strontium	Y 88.90585 Yttrium	Zr 91.224 Zirconium	Nb 92.90638 Niobium	Mo 95.96 Molybdenum	Tc 98.9062 Technetium	Ru 101.07 Ruthenium	Rh 102.90550 Rhodium	Pd 106.42 Palladium	Ag 107.8682 Silver	Cd 112.411 Cadmium	In 114.818 Indium	Sn 118.710 Tin	Sb 121.760 Antimony	Te 127.60 Tellurium	I 126.90447 Iodine	Xe 131.293 Xenon																		
6	Cs 132.90545 Cesium	Ba 137.327 Barium	La 138.94788 Lanthanum	Hf 178.49 Hafnium	Ta 180.9479 Tantalum	W 183.84 Tungsten	Re 186.207 Rhenium	Os 190.23 Osmium	Ir 192.217 Iridium	Pt 195.084 Platinum	Au 196.96657 Gold	Hg 200.59 Mercury	Tl 204.3833 Thallium	Pb 207.2 Lead	Bi 208.98040 Bismuth	Po 208.9824 Polonium	At 209.9871 Astatine	Rn 222.0176 Radon																		
7	Fr 223.0197 Francium	Ra 226.0254 Radium	Ac 227.0278 Actinium	Rf 261.11 Rutherfordium	Db 262.11 Dubnium	Sg 263.12 Seaborgium	Bh 262.12 Bohrium	Hs 264 Hassium	Mt 266.1378 Meitnerium	Ds 269 Darmstadtium	Rg 272 Roentgenium	Uub 277 Ununbium	Uut 284 Ununtrium	Uuq 289 Ununquadium	Uup 288 Ununpentium	Uuh 292 Ununhexium	Uus 292 Ununseptium	Uuo 294 Ununoctium																		
Lanthanoids	6	Ce 140.116 Cerium	Pr 140.90765 Praseodymium	Nd 144.242 Neodymium	Pm 144.9127 Promethium	Sm 150.36 Samarium	Eu 151.964 Europium	Gd 157.25 Gadolinium	Tb 158.92535 Terbium	Dy 162.500 Dysprosium	Ho 164.93032 Holmium	Er 167.259 Erbium	Tm 168.93421 Thulium	Yb 173.054 Ytterbium	Lu 174.9668 Lutetium																					
Actinoids	7	Th 232.0381 Thorium	Pa 231.03588 Protactinium	U 238.02891 Uranium	Np 237.0482 Neptunium	Pu 244.0642 Plutonium	Am 243.0614 Americium	Cm 247 Curium	Bk 247.0703 Berkelium	Cf 251.0796 Californium	Es 252.09 Einsteinium	Fm 257.0951 Fermium	Md 258.10 Mendelevium	No 259.1009 Nobelium	Lr 260.1053 Lawrencium																					

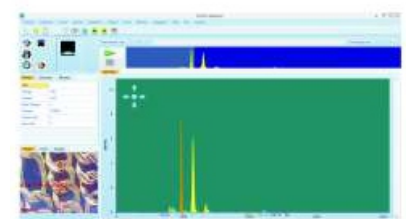
Technical Parameters

Model	Signet Si-pin
Detector:	Si(Silicone Pin)
Measurement objects:	Solid, Powder, Liquid
Measuring Accuracy:	+/- 0.15%,
Analysis range:	1% ~ 99.99%
High Voltage power supply:	0~50Kv/0~1MA.
Testable elements :	72 kinds of elements (gold, silver, platinum, palladium, iridium, cadmium, copper, nickel, zinc , Rhodium, ruthenium, iron, cobalt, osmium, tungsten, lead, manganese, rhenium...) etc....
X-ray source:	Triple Stage W- Target X-ray Tube.
Test time:	10 seconds to 60 seconds (40 Seconds for best results).
Test point diameter:	1 ~ 2mm
Environment temperature:	0°C ~ 35°C
Environment humidity:	<70%
Input voltage:	230V/50Hz
Sample (Chamber) cavity size:	310*270*80 (mm)
Instrument dimensions (External):	460*390*350 (mm)
Net Weight:	38 Kg
Light Tube Flow	0 μ A ~ 1000 μ A
Detector Resolution	145+/-15eV



Highlights

- 1.Simple software and user friendly.
- 2.Fast - get accurate results in just 40 seconds.
3. We can generate report in multiple formats.
4. AMETEK(Amptek) Detector USA Technology made for India.
- 5.HD Camera For Easy Sample Placement



Spectrum



Element	Concentration(%)
Gold	81.714%
Silver	13.123%
Copper	2.402%
Iron	0.000%
Rhodium	0.000%
Zinc	0.000%
Cobalt	0.000%
Nickel	0.000%
Palladium	0.000%
Platinum	0.000%
Cadmium	0.000%

Result

Gw01, Bharat Diamond Bourse, BKC, Bandra East, Mumbai - 51.
Contact : + 91-22-23639900 / +91-22-26756575
Mob. : +91 9821612340 / +91 9004377772
• Email : info@semsonint.com • Website : www.semsonint.com