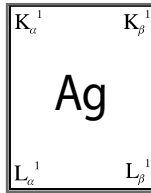


H Hydrogen 1	
Li Lithium 3	Be Beryllium 4
Na Sodium 11	Mg Magnesium 12

Key to Energy Values



X-RAY ENERGY REFERENCE

ALL NITON XRF ANALYSERS FEATURE:

- 100% portable handheld operation
- Completely non-destructive testing
- Laboratory quality results in seconds
- Intuitive touch screen interface
- Simple point-and-shoot functionality

He Helium 2

0.18 B Boron 5	0.28 C Carbon 6	0.39 N Nitrogen 7	0.53 O Oxygen 8	0.68 F Fluorine 9	0.85 Ne Neon 10
1.49 Al Aluminum 13	1.55 Si Silicon 14	1.74 P Phosphorus 15	1.83 S Sulfur 16	2.02 Cl Chlorine 17	2.14 Ar Argon 18

3.31 K Potassium 19	3.59 Ca Calcium 20	3.69 Sc Scandium 21	4.01 Ti Titanium 22	4.46 V Vanadium 23	4.51 Cr Chromium 24	4.93 Mn Manganese 25	4.95 Fe Iron 26	5.43 Co Cobalt 27	5.41 Ni Nickel 28	5.90 Cu Copper 29	6.49 Zn Zinc 30	6.40 Ga Gallium 31	7.06 Ge Germanium 32	6.93 As Arsenic 33	7.65 Se Selenium 34	7.48 Br Bromine 35	8.05 Kr Krypton 36	8.64 Rb Rubidium 37	9.57 Sr Strontium 38	9.25 Y Yttrium 39	10.26 Zr Zirconium 40	9.89 Nb Niobium 41	10.98 Mo Molybdenum 42	10.54 Tc Technetium 43	11.73 Ru Ruthenium 44	11.22 Rh Rhodium 45	12.50 Pd Palladium 46	11.92 Ag Silver 47	13.29 Cd Cadmium 48	12.65 In Indium 49	14.11 Sn Tin 50	12.85 Sb Antimony 51	14.11 Te Tellurium 52	12.65 I Iodine 53	14.11 Xe Xenon 54													
13.39 Rb Rubidium 37	14.96 Sr Strontium 38	14.16 Y Yttrium 39	15.83 Zr Zirconium 40	14.96 Nb Niobium 41	16.74 Mo Molybdenum 42	15.77 Tc Technetium 43	17.67 Ru Ruthenium 44	16.61 Rh Rhodium 45	18.62 Pd Palladium 46	17.48 Ag Silver 47	19.61 Cd Cadmium 48	18.41 In Indium 49	20.59 Sn Tin 50	19.28 Sb Antimony 51	21.66 Te Tellurium 52	20.21 I Iodine 53	22.72 Xe Xenon 54	21.18 Cs Cesium 55	23.82 Ba Barium 56	22.16 La Lanthanum 57	24.94 Ce Cerium 58	23.17 Pr Praseodymium 59	26.09 Nd Neodymium 60	24.21 Pm Promethium 61	27.27 Sm Samarium 62	25.27 Eu Europium 63	28.48 Gd Gadolinium 64	26.36 Tb Terbium 65	29.72 Dy Dysprosium 66	28.61 Ho Holmium 67	32.29 Er Erbium 68	29.80 Tm Thulium 69	33.64 Yb Ytterbium 70	29.80 Lu Lutetium 71														
1.69 Cs Cesium 55	1.75 Ba Barium 56	1.81 La Lanthanum 57	1.87 Ce Cerium 58	1.92 Pr Praseodymium 59	2.00 Nd Neodymium 60	2.04 Pm Promethium 61	2.12 Sm Samarium 62	2.17 Eu Europium 63	2.26 Gd Gadolinium 64	2.29 Tb Terbium 65	2.40 Dy Dysprosium 66	2.42 Ho Holmium 67	2.54 Er Erbium 68	2.56 Tm Thulium 69	2.68 Yb Ytterbium 70	2.70 Lu Lutetium 71	2.83 Hf Hafnium 72	2.84 Ta Tantalum 73	2.99 W Tungsten 74	2.98 Re Rhenium 75	3.15 Os Osmium 76	3.13 Ir Iridium 77	3.32 Pt Platinum 78	3.29 Au Gold 79	3.49 Hg Mercury 80	3.44 Tl Thallium 81	3.66 Pb Lead 82	3.61 Bi Bismuth 83	3.84 Po Polonium 84	3.77 At Astatine 85	4.03 Rn Radon 86	3.94 Fr Francium 87	4.22 Ra Radium 88	4.11 Ac Actinium 89	4.42 Th Thorium 90	4.11 Pa Protactinium 91	4.42 U Uranium 92	4.11 Np Neptunium 93	4.42 Pu Plutonium 94	4.11 Am Americium 95	4.42 Cm Curium 96	4.11 Bk Berkelium 97	4.42 Cf Californium 98	4.11 Es Einsteinium 99	4.42 Fm Fermium 100	4.11 Md Mendelevium 101	4.42 No Nobelium 102	4.11 Lr Lawrencium 103
30.97 Cs Cesium 55	34.98 Ba Barium 56	32.19 La Lanthanum 57	36.38 Ce Cerium 58	32.07 Pr Praseodymium 59	37.42 Nd Neodymium 60	32.06 Pm Promethium 61	39.09 Sm Samarium 62	32.07 Eu Europium 63	40.78 Gd Gadolinium 64	32.06 Tb Terbium 65	42.94 Dy Dysprosium 66	32.06 Ho Holmium 67	44.96 Er Erbium 68	32.06 Tm Thulium 69	47.88 Yb Ytterbium 70	32.06 Lu Lutetium 71	178.08 Hf Hafnium 72	180.95 Ta Tantalum 73	183.85 W Tungsten 74	186.21 Re Rhenium 75	188.91 Os Osmium 76	190.23 Ir Iridium 77	195.08 Pt Platinum 78	196.97 Au Gold 79	200.59 Hg Mercury 80	204.38 Tl Thallium 81	207.2 Pb Lead 82	208.98 Bi Bismuth 83	209 Po Polonium 84	210 At Astatine 85	222 Rn Radon 86	223 Fr Francium 87	226 Ra Radium 88	227 Ac Actinium 89	232 Th Thorium 90	231 Pa Protactinium 91	238 U Uranium 92	237 Np Neptunium 93	244 Pu Plutonium 94	243 Am Americium 95	247 Cm Curium 96	247 Bk Berkelium 97	251 Cf Californium 98	252 Es Einsteinium 99	257 Fm Fermium 100	258 Md Mendelevium 101	259 No Nobelium 102	261 Lr Lawrencium 103
86.11 Fr Francium 87	97.47 Ra Radium 88	88.47 La Lanthanum 57	100.1 Ce Cerium 58	120.3 Pr Praseodymium 59	147.2 Nd Neodymium 60	147.2 Pm Promethium 61	151.96 Sm Samarium 62	158.93 Eu Europium 63	162.5 Gd Gadolinium 64	168.93 Tb Terbium 65	174.97 Dy Dysprosium 66	178.49 Ho Holmium 67	180.95 Er Erbium 68	183.85 Tm Thulium 69	187.04 Yb Ytterbium 70	188.91 Lu Lutetium 71	180.95 Hf Hafnium 72	186.21 Ta Tantalum 73	183.85 W Tungsten 74	186.21 Re Rhenium 75	190.23 Os Osmium 76	192.22 Ir Iridium 77	195.08 Pt Platinum 78	196.97 Au Gold 79	200.59 Hg Mercury 80	204.38 Tl Thallium 81	207.2 Pb Lead 82	208.98 Bi Bismuth 83	209 Po Polonium 84	210 At Astatine 85	222 Rn Radon 86	223 Fr Francium 87	226 Ra Radium 88	227 Ac Actinium 89	232 Th Thorium 90	231 Pa Protactinium 91	238 U Uranium 92	237 Np Neptunium 93	244 Pu Plutonium 94	243 Am Americium 95	247 Cm Curium 96	247 Bk Berkelium 97	251 Cf Californium 98	252 Es Einsteinium 99	257 Fm Fermium 100	258 Md Mendelevium 101	259 No Nobelium 102	261 Lr Lawrencium 103

- Not analysed by Portable XRF
- Niton XL Series
- Requires GOLDD technology for metal alloys
- Requires GOLDD technology for mining & minerals mode