DRAWELL
Artist of Science

# Handheld XRF Alloy Analyzer

# DW-1688、DW-1688S

## Features

● Smaller, quicker, more accurate, and more portable

● It is specifically designed for NTD and PMI users, and the detection of places that are unreachable, and welds.

It has excellent analysis performance to low content Ti v.

● DW-1688 can analyze common alloys in one second or less. The system is built on the Microsoft WINCE platform, which has better compatibility with the computer platform in facilitating data communication. The users who want to use the device need only to know how to use a computer.

● Mirror system design is adopted in this device. The temporary files generated during system operation will be automatically deleted after the device restarts, and it can run smoothly as a new one for almost 10 years. One key system test, one step from startup to test, the test has never been so convenient.

# Specifications

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| **Weight** | **Device: 1.50kg, 1.65kg with battery.** |
| **Dimension** | **250mm x 75mm x 270mm (L*W*H)** |
| **Excitation source** | **High-power high-performance X-ray microtube** |
| **Target** | **5 available targets for ray tubes are: gold (Au), silver (Ag), tungsten (W), tantalum (Ta), palladium (Pd)** |
| **Voltage** | **35kV-50kV voltage (changeable)** |
| **Filter** | **A variety of selectable filters, automatically adjusted according to different tested objects** |
| **Detector** | **High-resolution Si-Pin detector (DW-1688S: optional SDD detector)** |
| **Detector refrigeration temperature** | **Peltier effect semiconductor refrigeration system** |
| **Standard film** | **316 external standard films/window protection cover(internal plus version standard films available)** |
| **Power supply** | **1 lithium battery (7.2v\6600mAh)** |
| **Processor** | **High-performance ARM pulse processor** |
| **Operating system** | **Windows CE6.0** |
| **Data transmission** | **Hotspot sharing via Bluetooth and Wifi** |
| **Standard mode** | **Alloy Plus 6.0** |
| **Data processing** | **32G large-capacity data storage card: >80,000 sets of data and spectrograms** |
| **Display screen** | **High-resolution TFT industrial-grade colored high-definition touch screen, it is ergonomic, sturdy, dust-proof, and waterproof, clearly visible under any light conditions** |
| **Outline design** | **The integrated designed body is sturdy, waterproof, dustproof, antifreeze, shockproof, and can be used normally in harsh environments.** |
| **Safe operation** | **”One key" detection, auto-lock, detection auto-stop functions. The X-ray will automatically be turned off if there is no sample in front of the detection window for 2 seconds. 3/2 of the shell of the device is covered with a 6061 aluminum alloy frame design, with better X-ray blockage.** |
| **Detection Report** | **Customized detection report available as per the customers' demands** |
| **Element analysis** | **Ti,V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hf, Ta, W, Pb, Bi, Zr, Nb, Mo, Cd, Sn, Sb, Re, In, Au, Ag, Pt, Pd, Ru, Rh, Ir, etc. (DW-1688S can test 5 more elements including Al,Mg,Si,S,P)** |

**Safe Protection Box**

The device is protected by a safe protection box that is waterproof, dustproof and drop-proof.

The box meets the requirement in ASTM 05276-1998 (2009) and is tested in the cargo container drop method