

QUOTE TEXT

**HITACHI**  
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# X-MET8000 Expert

**X-MET8000 Expert – Alloy Plus package**  
 The Handheld XRF analyser for ultimate alloy analysis.



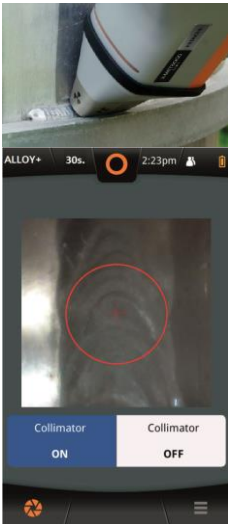
## Key Features



The X-MET8000 Expert handheld energy dispersive X-ray fluorescence (EDXRF) analyser provides the ultimate performance for alloy identification and analysis in terms of speed, accuracy and precision, without compromising on ergonomics and ruggedness. Its key features and benefits include:

- Fast, non-destructive XRF analysis and grading of alloys.
- Optimised geometry for best performance across the whole elements range:
  - 50 kV Rh-target X-ray tube: versatile and future proof
  - High performance, large area silicon drift detector (SDD) for best precision, low limits of detection (trace/tramp elements analysis), and superior light elements analysis (e.g. P and S in steel, Si in Al alloys), providing fast and accurate grade separation and identification.
- Minimal user training: Factory-calibrated and ready to use.
- Intuitive, icon-driven user interface, for easy operation, even with gloves on.
- Robust fundamental parameters (FP) methods and empirical calibrations (traceable to certified reference materials) for superior precision and accuracy.
- Ergonomic, well balanced and lightweight analyser (1.5 kg with battery).
- IP54 compliant (NEMA3 equivalent) for superior protection against dust and splash water.
- Tested to MIL-STD 810G for ruggedness.
- Full day operation (up to 12 hours) with a single Li-ion battery. Two batteries included as standard.
- Camera for accurate positioning of the analyser on the sample (e.g. small sample, weld, etc.). Images can be saved, reviewed, and added to results reports.
- Powerful data management.
- Accessories for optimum user safety: light radiation shield to measure Al alloys and plastics, light stand and safety shield for small samples analysis, and background plate for plastics analysis.
- The culmination of 40 years knowledge and experience in portable XRF solutions.
- Registered product: 2-year instrument factory warranty. Warranty includes X-ray tube and detector, excludes consumables. 90-day warranty on batteries.

## Performance



Camera view with optional small-spot collimator

- The largest grade library on the market, for accurate grade ID.
- Pre-loaded, user selectable grade libraries: AISI, DIN, JIS and GB.
- Accurate chemistry in seconds, even for tramp/trace elements.
- Automatic compensation for varying sample shapes and sizes, providing superb accuracy even when analysing small samples and uneven surfaces (chips, turnings or shavings, wires or rods, weld seams, pipes, fasteners...).
- Superior light element measurement (Mg, Al, Si, P, S) without the need for helium purge or vacuum pump.
- Simple method selection to suit your analysis needs.
- Fast start-up: switch on and measure in seconds.
- Optimised nose design to test materials inside bends and corners (e.g. welds).
- CRM check sample provided for confirmation of continuous high performance over short and long term.
- Optional small-spot collimator (3 mm-diameter) to isolate a feature or component (e.g. weld) from its surrounding material: our optimised "collimated" calibrations ensure fast and accurate analysis, maximising testing throughput.
- Hot sample analysis: measure samples at up to 400°C, including light elements, with our unique HERO™ window: no need to use special calibrations, no loss of performance!

## Built to last



### Compact, rugged and robust design, built to withstand the harshest environments:

- IP54 compliant (NEMA3 equivalent) for superior protection against dust and splash water.
- Tested to MIL-STD 810G for drop, vibrations and shocks.
- Quick-swap window: no tool required, no risk to puncture the detector window with a screwdriver.
- Optional shield to prevent detector puncture when measuring sharp, irregularly shaped pieces (e.g. turnings, shavings, screws).
- Integrated 4.3" Blanview® LCD colour touch screen display with excellent visibility and readability, even in direct sunlight.
- Integrated computer for enhanced reliability, weather protection, and faster data processing.
- Large heat sink for maximal reliability, even in high temperature conditions. Analyser specified for -10°C to +50°C operating temperatures.
- Fitted with rubber bumpers around the screen, the analyser nose and the handle, to provide extra protection against shocks and to prevent slipping from uneven surfaces (e.g. pipes).

## Powerful, flexible and easy to use user interface



### Intuitive user interface with powerful Report Generator software:

- Large, clear functional icons for easy operation, even with gloves on.
- Intuitive user interface, minimal training required.
- Large grade display with closest match information.
- Customisable results screen to suit individual requirements: display elements of interest, order elements by importance, name or concentration level, and/or show Pass/Fail messages.
- Store up to 100,000 results including the spectra and camera images (if camera fitted).
- Download results and reports directly on a USB memory stick, or onto PC using a USB cable or WiFi.
- Create customised analysis reports with analysis info, company logos, spectra etc.
- CSV report format for full flexibility, or tamper-proof pdf for ultimate data security.
- All the software is installed in the X-MET server and can be accessed by most web browsers. No software installation needed.
- Advanced data transfer options and reporting software are all included as standard.
- OiConnect / LiveConnect app and cloud service to share and manage results on the go.
- Available in 13 languages: English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese and Finnish.

## Alloy plus package summary

| Description   | Quantity |
|---|----------|
| X-MET8000 Expert analyser.  | 1        |
| Grade libraries: AISI, DIN, JIS, GB, Au karat.  | 1        |
| Alloy FP.   | 1        |
| Alloy LE FP.  | 1        |
| Alloy LE empirical calibrations.  | 1        |
| Precious FP (for precious metal alloys, e.g. jewellery).  | 1        |
| CRM SS316 check sample.   | 1        |
| Li-ion battery 6.2 Ah.  | 2        |
| Charger set and external power supply set (with Australia, UK, US and Europe plug adaptors).                        | 1        |
| Set of 5 thin Prolene windows.  | 1        |
| Background plate.   | 1        |
| Light radiation shield.   | 1        |
| Light stand and safety shield.  | 1        |
| Camera.   | 1        |
| Carrying case, foam and box.  | 1        |
| Neck/shoulder lanyard.  | 1        |
| Wrist strap.  | 1        |
| USB memory stick (8 Gb) containing the backup file and Windows drivers.   | 1        |
| USB cable.  | 1        |
| Calibration folder with documents, certificates and second USB memory stick containing the user and safety manuals. | 1        |
| WiFi, for the ability to remotely send results to a networked PC or to our app and cloud service.                   | 1        |
| Bluetooth, for the ability to connect to a Bluetooth printer or barcode scanner.                                    | 1        |

## Optional calibrations and accessories

| Description  | Part number |
|--|-------------|
| FAC calibration.   | 54-4106213  |
| Precious metals in car catalyst calibration.   | 54-4106217  |
| Benchtop stand, for the safe measurement of small and awkward shape samples.   | 54-4106313  |
| Holster and belt, for hands-free transportation.   | 54-4106296  |
| Small-spot collimator, for accurate analysis of small features and components (e.g. welds). Note: this item does not include "collimated" calibrations (to be added separately). Include "collimated" calibrations (to be added separately). | 54-4106453  |
| HERO™ window, for the analysis (including light elements) of samples up to 400°C; set of 2.  | 54-4106384  |

## "X-MET8000 Expert - Alloy plus with "shield" package

| Description  | Part number |
|--|-------------|
| For maximum ruggedness when measuring sharp and irregularly-shaped pieces (e.g. turnings, shavings, screws, fasteners), the X-MET8000 Expert can be supplied with a shield. The shield includes an integrated Prolene window for protection against dust and water. When the X-MET8000 Expert is purchased with the shield, all calibrations are carried out with the shield in place. The contents of "Alloy package with shield" are the same as above, except for the set of 5 Prolene windows, which is replaced with a set of 5 shields.<br>Note: the collimator option is not available with the "shield" package. | 54-4106267  |

## Extended warranties

| Description   | Part number                           |
|---|---------------------------------------|
| Extend our standard product warranty by 1, 2 or 3 years, and additionally benefit from a 25% discount on accidental damage repairs, X-MET loans, and annual recertification and safety checks. Extended warranties provide you with the lowest cost of ownership. | 54-XMET8000-EXWA<br>(1, 2 or 3 years) |