

X-MET8000 Expert

Analyser:

- Handheld EDXRF analyser.
- Large area, high resolution Silicon Drift (SDD) detector.
- Rh target X-ray tube (4 W; 50 kV max., 200 μ A max.).
- Automatic 6-position filter changer.
- Measurement spot size: 10.7 mm x 9.4 mm.
- Operating temperature: -10 °C to +50 °C.

Screen and operating system:

- 4.3" Blanview touch screen.
- Display resolution: 480 (H) x 800 (V) dots.
- 16 GB internal memory.
- Capable of holding 100,000 results with spectra and images (if camera fitted).
- Bluetooth, WiFi and USB data transfer.
- Graphical user interface available in 13 languages: Chinese traditional and simplified, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Spanish and Russian.

Calibrations:

- Factory-loaded robust fundamental parameters (FP) and empirical calibrations (traceable to certified reference materials) available for a wide variety of applications (e.g. alloys, RoHS, wood, car catalysts...).
- Customer specific calibrations with optional calibration software.

Analytical range:

- From Mg to U, up to 35 elements depending on application.

Batteries:

- Rechargeable, removable, located inside handle.
- 6.2 Ah Li-ion batteries (Quantity: 2).
- Up to 10-12 hours battery life.
- 110/230 V 50/60 Hz battery charger.



Radiation safety:

- Password protection.
- Infrared proximity sensor.
- Count rate sensor.
- Fail-safe warning lights.

Storage and transportation:

- Waterproof carrying and storage case (TüV tested) for X-MET and accessories.
- Case dimensions: 415 mm (L) x 325 mm (W) x 170 mm (H).
- Neck/shoulder lanyard.
- Wrist strap.
- Optional holster and belt.

Standard accessories:

- SS316 check sample.
- Battery charger, with UK, US, Euro and Australia plug adapters (charging time: ~8 hours).
- Two Li-ion batteries.
- USB cable.
- USB memory stick containing the User Manual and the Safety Manual (available in 13 languages).
- Light travel stand with safety shield.
- Light radiation shield.
- Background plate.
- WiFi and Bluetooth connectivity.

Optional accessories:

- Benchtop stand (weight: 9.5 kg; internal chamber size: 188 mm L x 188 mm W x 146 mm H).
- Bluetooth barcode scanner.
- Bluetooth printer.

Analysers connectivity ports:

- USB 2.0.
- Bluetooth 2.0 (EDR).
- WiFi 802.11 b/g.

PC software (standard):

- Spectrum Display – enables to select analysis condition, collect, view and compare samples spectra.
- Report Generator - enables the creation of customised reports.

Optional PC software functionality:

- Calibration software – enables the user to create a customised empirical calibration using customer's standards for unique applications.

Integrated camera (included):

- For accurate positioning of the analyser on the sample.
- Images can be saved, viewed on the X-MET display, and added to reports.
- Magnification: x 6.
- Image size: 640 pixels x 480 pixels.
- Image area on sample: approx. 7.5 mm x 6 mm.
- Camera technology: CMOS.

Optional small-spot collimator:

- For accurate measurement of small features such as welds, enabling to isolate the area of interest from surrounding material.
- 3 mm-diameter analysis spot.
- Enable/disable small spot in UI.
- Requires camera to position the X-MET on the sample accurately (camera image will show spot location).

Optional integrated GPS receiver:

- Collects and saves location coordinates along with analysis results.
- Accuracy position : 3.0 m CEP with zero interference.

Reliability:

- CE and CB approved.
- IP54 rated (NEMA 3 equivalent): splash water and dust proof.
- Tested to MIL-STD-810G for vibration, drop and shock (Method 514.6, Procedure I, Category 4; Method 516.6, Procedures I and IV).
- Registered product: 2 year factory warranty; excludes consumables; 90-day warranty on batteries.
- Optional, replaceable window-shield to protect analytics from sharp and uneven objects and prevent costly repairs.

Hot sample measurement:

- Standard maximum sample temperature: 120 °C (248 °F).
- Optional HERO™ window, to measure samples up to 400 °C (752 °F), including light elements. Same analytical performance as with Prolene® window.

Dimensions:

- 93 mm (W) x 210 mm (L) x 272 mm (H).

Weight:

- 1.3 kg without battery.
- 1.5 kg with battery.

Note:

In the interests of continued product improvement, Hitachi reserves the right to change any part of the description and specification without notice.

X-MET8000 Expert Geo

Analyser:

- Handheld EDXRF analyser.
- 25mm², high resolution silicon-drift detector (SDD).
- BOOST™ technology for up to 10 times the sensitivity of other HHXRFs.
- Rh target X-ray tube (4 W; 50 kV max., 200 µA max.).
- Automatic 6-position filter changer.
- Measurement spot size: 10.7 mm x 9.4 mm.
- Operating temperature: -10 °C to +50 °C.



Screen and operating system:

- 4.3" Blanview touch screen.
- Display resolution: 480 (H) x 800 (V) dots.
- 16 GB internal memory.
- Capable of holding 100,000 results with spectra and images (if camera fitted).
- Bluetooth, WiFi and USB data transfer.
- Graphical user interface available in 13 languages: Chinese traditional and simplified, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Spanish and Russian.

Calibrations:

- Factory-loaded robust fundamental parameters (FP) for various applications including soil, mining and metal alloys.
- Customer specific calibrations with optional calibration software.

Analytical range:

- From Mg to U, up to 40 elements depending on application (Note: other elements may be added depending on application).

Batteries:

- Rechargeable, removable, located inside handle.
- 6.2 Ah Li-ion batteries (Quantity: 2).
- Up to 10-12 hours battery life.
- 110/230 V 50/60 Hz battery charger.

Storage and transportation:

- Waterproof carrying and storage case (TüV tested) for X-MET and accessories.
- Case dimensions: 415 mm (L) x 325 mm (W) x 170 mm (H).
- Neck/shoulder lanyard.
- Wrist strap.
- Optional holster and belt.

Standard accessories:

- SS316 check sample.
- Soil and mining CRMs (depending on package), blank check sample.
- Battery charger, with UK, US, Euro and Australia plug adapters (charging time: ~8 hours).
- Two Li-ion batteries.
- USB cable.
- USB Memory stick containing the User Manual and the Safety Manual (available in 13 languages).
- Light radiation shield.
- Background plate.
- WiFi and Bluetooth connectivity.

Optional accessories:

- Light travel stand with safety shield (included in Mining package).
- Benchtop stand (weight: 9.5 kg; internal chamber size: 188 mm L x 188 mm W x 146 mm H).
- Bluetooth barcode scanner.
- Bluetooth printer.
- X-MET pole.
- Bipod.

Radiation safety:

- Password protection.
- Infrared proximity sensor.
- Count rate sensor.
- Fail-safe warning lights.

Analyser's connectivity ports:

- USB 2.0.
- Bluetooth 2.0 (EDR).
- WiFi 802.11 b/g.

PC software (standard):

- Spectrum Display – enables to select analysis condition, collect, view and compare samples spectra.
- Report Generator - enables the creation of customised reports.
- Calibration software – enables the user to create a customised empirical calibration using customer's standards for unique applications.

Integrated camera (included):

- Images can be saved, viewed on the X-MET display, and added to reports.
- For accurate positioning of the analyser on the sample.
- Magnification: x6.
- Image size: 640 pixels x 480 pixels.
- Image area on sample: approx. 7.5 mm x 6 mm.
- Camera technology: CMOS.

Optional small-spot collimator:

- Not available in the Soil package.
- For accurate measurement of small features such as mineral veins, enabling to isolate the area of interest from surrounding material.
- 3 mm-diameter analysis spot.
- Enable/disable small spot in UI.
- Requires camera to position the X-MET on the sample accurately (camera image will show spot location).

Optional integrated GPS receiver:

- Collects and saves location coordinates along with analysis results.
- Accuracy position: 3.0 m CEP with zero interference.
- Included in the Mining package.

Reliability:

- CE and CB approved.
- IP54 rated (NEMA 3 equivalent): splash water and dust proof.
- Tested to MIL-STD-810G for vibration, drop and shock (Method 514.6, Procedure I, Category 4; Method 516.6, Procedures I and IV).
- Registered product: 2 year factory warranty; excludes consumables; 90-day warranty on batteries.

Dimensions:

- 93 mm (W) x 210 mm (L) x 272 mm (H).

Weight:

- 1.3 kg without battery.
- 1.5 kg with battery

Note:

In the interests of continued product improvement, Hitachi reserves the right to change any part of the description and specification without notice.

X-MET8000 Optimum

Analyser:

- Handheld EDXRF analyser.
- Large area, high resolution Silicon Drift (SDD) detector.
- Rh target X-ray tube (4 W; 40 or 50 kV max. depending on application; 200 µA max.).
- Automatic 6-position filter changer.
- Measurement spot size: 10.7 mm x 9.4 mm.
- Operating temperature: -10 °C to +50 °C.

X-MET8000



Screen and operating system:

- 4.3" Blanview touch screen.
- Display resolution: 480 (H) x 800 (V) dots.
- 16 GB internal memory.
- Capable of holding 100,000 results with spectra and images (if camera fitted).
- Bluetooth, WiFi and USB data transfer.
- Graphical user interface available in 13 languages: Chinese traditional and simplified, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Spanish and Russian.

Calibrations:

- Factory-loaded robust fundamental parameters (FP).
- Customer specific calibrations with optional calibration software.

Analytical range:

- From Mg to U, up to 35 elements depending on application.

Batteries:

- Rechargeable, removable, located inside handle.
- 6.2 Ah Li-ion batteries (Quantity: 2).
- Up to 10-12 hours battery life.
- 110/230 V 50/60 Hz battery charger.

Radiation safety:

- Password protection.
- Infrared proximity sensor.
- Count rate sensor.
- Fail-safe warning lights.

Storage and transportation:

- Waterproof carrying and storage case (TüV tested) for X-MET and accessories.
- Case dimensions: 415 mm (L) x 325 mm (W) x 170 mm (H).
- Neck/shoulder lanyard.
- Wrist strap.
- Optional holster and belt.

Standard accessories:

- SS316 check sample.
- Battery charger, with UK, US, Euro and Australia plug adapters (charging time: ~8 hours).
- Two Li-ion batteries.
- USB cable.
- USB Memory stick containing the User Manual and the Safety Manual (available in 13 languages).
- WiFi and Bluetooth connectivity.
- Light radiation shield.

Optional accessories:

- Light travel stand with safety shield.
- Background plate.
- Benchtop stand (weight: 9.5 kg; internal chamber size: 188 mm L x 188 mm W x 146 mm H).
- Bluetooth barcode scanner.
- Bluetooth printer.

Analysers' connectivity ports:

- USB 2.0.
- Bluetooth 2.0 (EDR).
- WiFi 802.11 b/g.

PC software (standard):

- Spectrum Display – enables to select analysis condition, collect, view and compare samples spectra.
- Report Generator - enables the creation of customised reports.

Optional PC software functionality:

- Calibration software – enables the user to create a customised empirical calibration using customer's standards for unique application.

Optional integrated camera:

- For accurate positioning of the analyser on the sample.
- Images can be saved, viewed on the X-MET display, and added to reports.
- Magnification: x 6.
- Image size: 640 pixels x 480 pixels.
- Image area on sample: approx. 7.5 mm x 6 mm.
- Camera technology: CMOS.

Optional small-spot collimator:

- For accurate measurement of small features such as welds, enabling to isolate the area of interest from surrounding material.
- 3 mm-diameter analysis spot.
- Enable/disable small spot in UI.
- Requires camera to position the X-MET on the sample accurately (camera image will show spot location).

Optional integrated GPS receiver:

- Collects and saves location coordinates along with analysis results.
- Accuracy position : 3.0 m CEP with zero interference.

Reliability:

- CE and CB approved.
- IP54 rated (NEMA 3 equivalent): splash water and dust proof.
- Tested to MIL-STD-810G for vibration, drop and shock (Method 514.6, Procedure I, Category 4; Method 516.6, Procedures I and IV).
- Registered product: 2 year factory warranty; excludes consumables; 90-day warranty on batteries.
- Optional, replaceable window-shield to protect analytics from sharp and uneven objects and prevent costly repairs.

Hot sample measurement:

- Standard maximum sample temperature: 120 °C (248 °F).
- Optional HERO™ window, to measure samples up to 400 °C (752 °F), including light elements. Same analytical performance as Prolene® window.

Dimensions:

- 93 mm (W) x 210 mm (L) x 272 mm (H).

Weight:

- 1.3 kg without battery.
- 1.5 kg with battery.

Note:

In the interests of continued product improvement, Hitachi reserves the right to change any part of the description and specification without notice.

X-MET8000 Smart

Analyser:

- Handheld EDXRF analyser.
- Large area, high resolution Silicon Drift (SDD) detector.
- Rh target X-ray tube (4 W; 40 kV max., 200 µA max.).
- Fixed filter.
- Measurement spot size: 10.7 mm x 9.4 mm.
- Operating temperature: -10 °C to +50 °C.

Screen and operating system:

- 4.3" Blanview touch screen.
- Display resolution: 480 (H) x 800 (V) dots.
- 16 GB internal memory.
- Capable of holding 100,000 results with spectra and images (if camera fitted).
- Bluetooth, WiFi and USB data transfer.
- Graphical user interface available in 13 languages: Chinese traditional and simplified, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Spanish and Russian.

Calibrations:

- Factory-loaded robust fundamental parameters (FP) for metal alloys, included precious metal alloys.

Analytical range:

- From K to U, up to 30 elements depending on application.

Batteries:

- Rechargeable, removable, located inside handle.
- 6.2 Ah Li-ion batteries (Quantity: 2).
- Up to 10-12 hours battery life.
- 110/230 V 50/60 Hz battery charger.



Radiation safety:

- Password protection.
- Infrared proximity sensor.
- Count rate sensor.
- Fail-safe warning lights.

Storage and transportation:

- Waterproof carrying and storage case (TüV tested) for X-MET and accessories
- Case dimensions: 415 mm (L) x 325 mm (W) x 170 mm (H).
- Wrist strap.
- Shoulder/neck lanyard.
- Optional holster and belt.

Standard accessories:

- SS316 check sample.
- Battery charger, with UK, US, Euro and Australia plug adapters (charging time: ~8 hours).
- Two Li-ion batteries.
- USB cable.
- USB Memory stick containing the User Manual and the Safety Manual (available in 13 languages).
- WiFi and Bluetooth connectivity.
- Light radiation shield.

Optional accessories:

- Light travel stand with safety shield.
- Background plate.
- Benchtop stand (weight: 9.5 kg; internal chamber size: 188 mm L x 188 mm W x 146 mm H).
- Bluetooth barcode scanner.
- Bluetooth printer.

Analyser's connectivity ports:

- USB 2.0.
- Bluetooth 2.0 (EDR).
- WiFi 802.11 b/g.

PC software (standard):

- Spectrum Display – enables to select analysis condition, collect, view and compare samples spectra.
- Report Generator – enables the creation of customised reports.

Optional integrated camera:

- For accurate positioning of the analyser on the sample.
- Images can be saved, viewed on the X-MET display, and added to reports.
- Magnification: x6.
- Image size: 640 pixels x 480 pixels.
- Image area on sample: approx. 7.5 mm x 6 mm.
- Camera technology: CMOS.

Optional integrated GPS receiver:

- Collects and saves location coordinates along with analysis results.
- Accuracy position : 3.0 m CEP with zero interference.

Reliability:

- CE and CB approved.
- IP54 rated (NEMA 3 equivalent): splash water and dust proof.
- Tested to MIL-STD-810G for vibration, drop and shock (Method 514.6, Procedure I, Category 4; Method 516.6, Procedures I and IV).
- Registered product: 1 year factory warranty; excludes consumables; 90-day warranty on batteries.

Hot sample measurement:

- Heat resistant Kapton® window.
- Maximum sample temperature: 400 °C (752 °F).
- At that temperature, do not use analysis times greater than 10 seconds, and do allow the analyser to cool down for 10 minutes between analyses.

Dimensions:

- 93 mm (W) x 210 mm (L) x 272 mm (H).

Weight:

- 1.3 kg without battery.
- 1.5 kg with battery.

Note:

In the interests of continued product improvement, Hitachi reserves the right to change any part of the description and specification without notice.