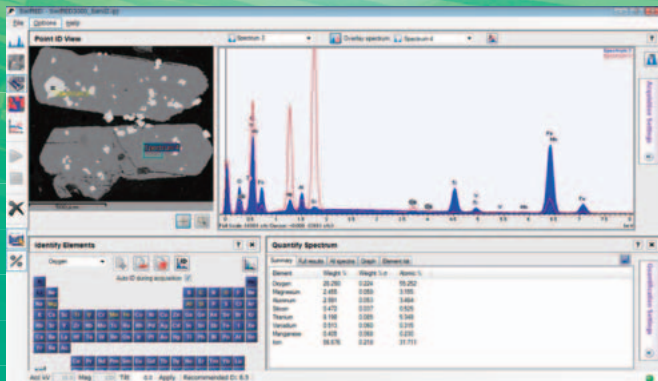




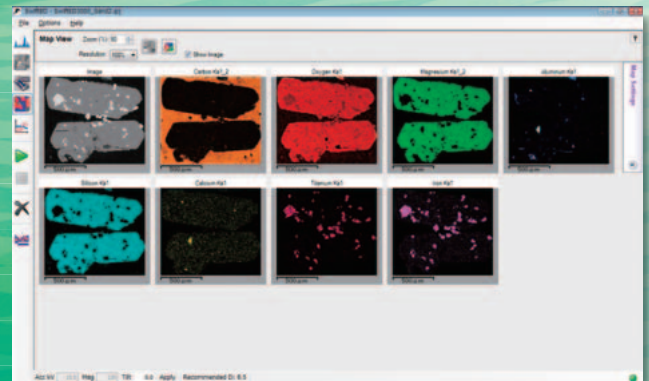
\*Typical Configuration of TM3000 with SwiftED3000  
\*EDX detector built-in type

# SwiftED3000

- Light Element detection from Boron upwards.
- Linescan, Mapping and multiple Point Analysis available.
- No LN<sub>2</sub> Required. Quick and Easy Analysis obtained within minutes.
- Image and elemental data displayed on the same monitor.



Point/Line Analysis



Mapping

# Main specifications of SwiftED3000

## Hardware

|                         |  |
|-------------------------|--|
| Detector                |  |
| Detector type           | Silicon drift detector   |
| Detection area          | 30mm <sup>2</sup>  |
| Energy resolution       | 161eV (Cu-Kα)<br>(equivalent to 137eV with Mn-Kα)                                  |
| X-ray window            | SATW (Super Atmosphere Thin Window)  |
| Detection element       | B <sub>5</sub> - U <sub>92</sub>   |
| Cooling method          | 2-stage thermoelectric (peltier)<br>cooling (without fan and LN <sub>2</sub> free) |
| Digital pulse processor | Multi channel analyzer<br>2,048 channel (10eV/ch)                                  |

\*Manufactured for Hitachi High-Technologies Corporation by Oxford Instruments Analytical Ltd.

## Software

|                       |  |
|-----------------------|--|
| Spectrum Display      | Scale expand and contract in vertical and horizontal,<br>KLM marker display  |
| Qualitative analysis  | Auto ID and manual peak ID   |
| Quantitative analysis | Standardless quantitative analysis   |
| Image capture         | 1,024 × 768, 512 × 384, 256 × 192 pixel  |
| Element Mapping       | Resolution: Select from 128, 256, 512 pixel<br>Max. measurable elements: 32<br>Mix Map: 3 elements<br>Line Scan<br>Spectrum Comparison: two spectra<br>Point & ID (Beam control)<br>Selectable Points: 128 points<br>Quadrangle: Arbitrary Size Settable |
| Help function         | Wizard function  |
| Data Management       | Managed by project   |
| Spectrum exporting    | BMP, TIFF, JPEG, EMSA, Text  |
| Data reporting        | Report template for printing<br>Exporting to Microsoft Word  |

## PC Specifications

|                     |  |
|---------------------|--|
| OS                  | Windows® 7 Professional (32bit)            |
| CPU                 | Intel® Core™ 2 Duo P8700 or Compatible CPU |
| Memory size         | 2GB  |
| Monitor resolution  | 15.4 type, WXGA 1,280 × 800 pixels         |
| Interface connector | USB 2.0, IEEE1394                          |

\*An associated PC to be procured locally.

\*Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.

\*Intel is registered trademarks of Intel Corp. or its affiliated companies in the United States and/or other countries.

\*Specifications of a PC are subject to change.

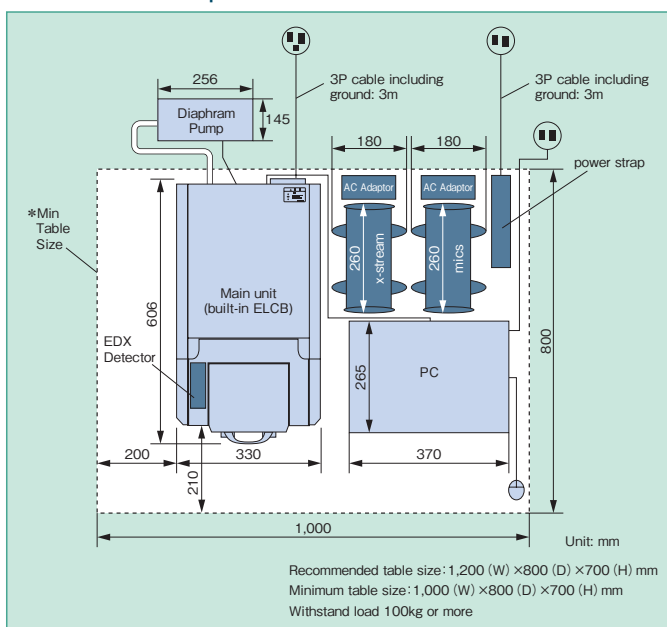
## Dimensions and Weight (Width × Depth × Height, Weight)

|                             |                          |
|-----------------------------|--------------------------|
| Detector unit               | 145 × 150 × 200mm, 2.7kg |
| x-stream                    | 180 × 260 × 330mm, 2.9kg |
| mics                        | 180 × 260 × 330mm, 2.9kg |
| Mains distribution block    | 225 × 60 × 40mm, 300g    |
| AC Adaptor for Analyzer     | 130 × 57 × 32mm, 400g    |
| AC Adaptor for IEEE1394 Hub | 130 × 57 × 32mm, 400g    |

## Installation Condition

|                     |  |
|---------------------|--|
| Room temperature    | 15~30°C  |
| Humidity            | 45~70%RH or less                                       |
| Power (TM3000)      | Single-phase AC100~240V (±10%) 50/60Hz 500VA, 3P cable |
| Grounding           | 100 ohm or less  |
| Power (PC)          | Single-phase AC100~240V (±10%) 50/60Hz 80VA, 2P cable  |
| Power (SwiftED3000) | Single-phase AC100~240V (±10%) 50/60Hz 100VA, 3P cable |

## Reference Example of TM3000 and SwiftED3000 Installation



\*Recommended table size: 1,200 × 800mm, withstand load: 100kg or more

\*Periodical maintenance is required for this apparatus

\*Limited to indoor operation

Notice: For proper operation, follow the instruction manual when using the instrument.

Specifications in this catalog are subject to change with or without notice, as Hitachi High-Technologies Corporation continues to develop the latest technologies and products for our customers.

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