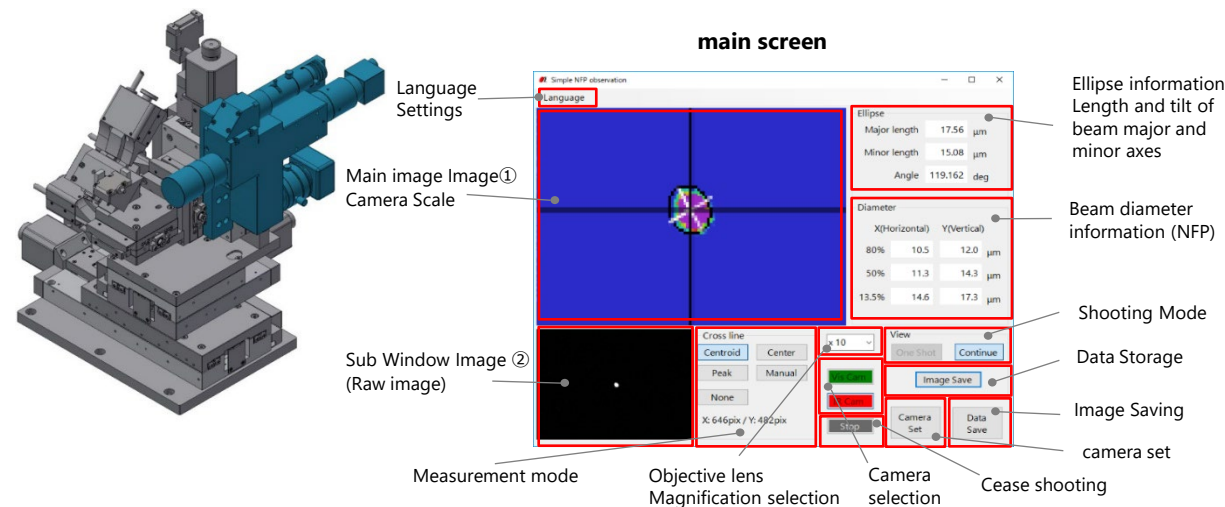


# NFP Observation Unit

# NFP-KIT

A set of observation system and control software for easy observation of the beam diameter (NFP) to be measured.

- By combining the automatic alignment unit with this product, adjustments can be made with reference to the luminance values in the image field of view.
- The ability to observe and acquire the beam diameter (NFP), elliptical information, and center-of-gravity point of the measurement object allows for simple evaluation and experimentation of optical fibers and optical waveguides.



## Guide

- Automatic Alignment Unit is used in combination with DAU-8100A-\*-SC series. For other configurations of the auto alignment unit or changes in observation magnification, please contact our sales department.

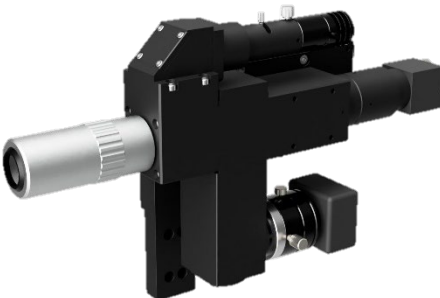
## Attention

- Control software cannot be sold as a stand-alone product.

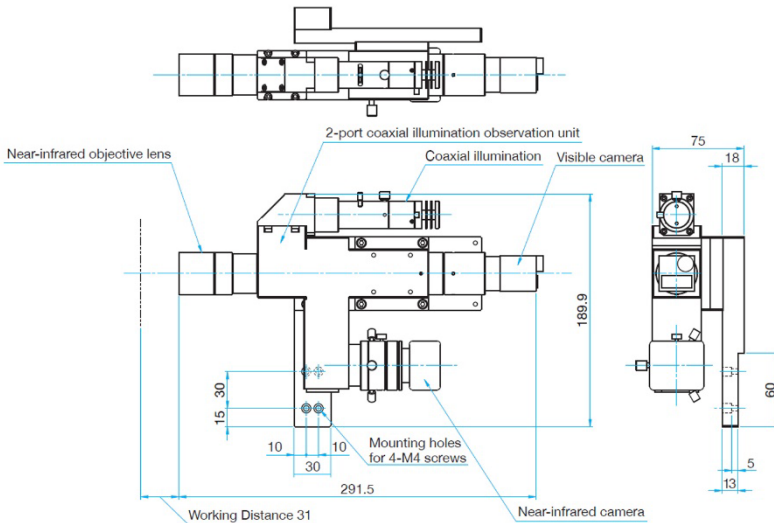
| Specifications                   |         |                      |
|----------------------------------|---------|----------------------|
| Part number                      |         | <b>NFP-KIT</b>       |
| name of product                  |         | NFP Observation Unit |
| Magnification                    |         | x10                  |
| Camera field of view             | Visible | 0.570mm * 0.427mm    |
|                                  | NIR     | 0.486mm * 0.362mm    |
| Wavelength                       | NIR     | 1550nm               |
| NFP information display accuracy | NIR     | ±1.5μm (4 pixel)     |

NFP observation unit configuration image

(Unit: mm)



Hexagonal socket head cap screw M4×12...4 screws



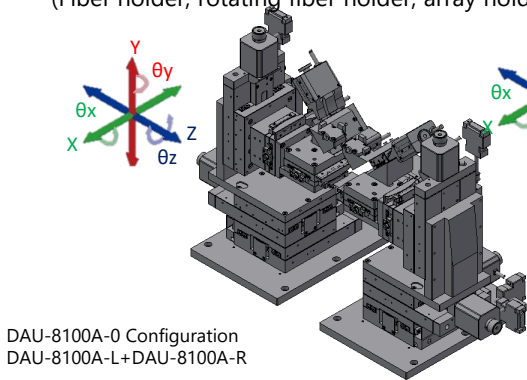
# Motorized 12-axis Optical Fiber Alignment Stage Unit

## DAU-8100A

RoHS

This is a stage unit for 6-axis automatic alignment combining  $\theta_x\theta_y\theta_z$  axes with linear motion XYZ axes. L type and R type are available symmetrically.

- High rigidity and performance of the stage enable highly reproducible centering.
- Compared to the conventional automatic centering unit (DAU-080A type), the rigidity is further improve and a longer travel distance can be secured.
- The holder is magnetically fixed and butt-jointed to ensure position reproducibility.
- Interchangeable holders allow for expansion of applications in accordance with changes in devices.  
(Fiber holder, rotating fiber holder, array holder, etc.)

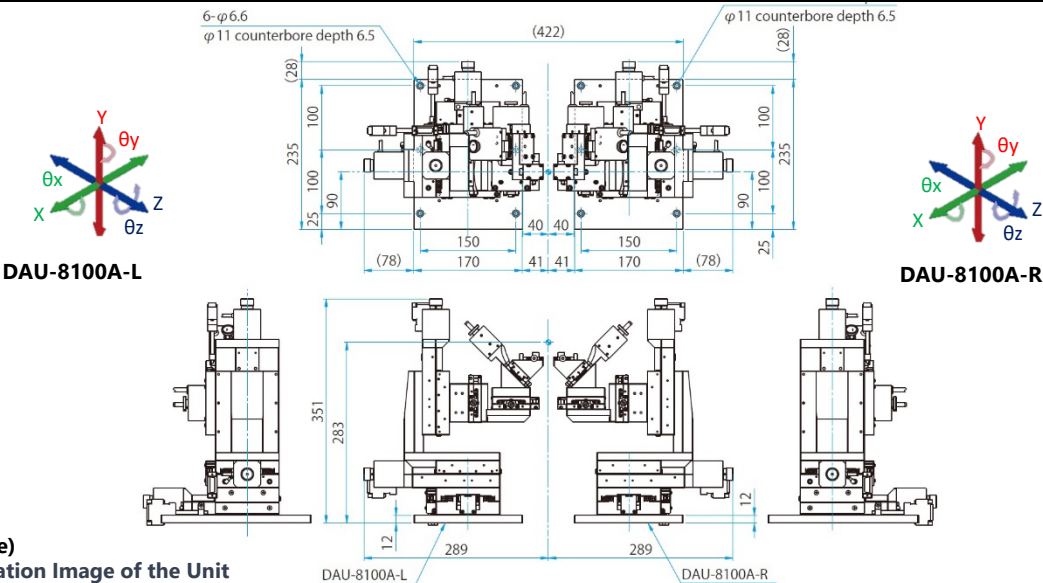


DAU-8100A-0 Configuration  
DAU-8100A-L+DAU-8100A-R

| Part Number    | Axis | Travel (X axis) |
|----------------|------|-----------------|
| DAU-8100A-0    | 12   | 50mm            |
| DAU-8100A-L    | 6    | 50mm            |
| DAU-8100A-R    | 6    | 50mm            |
| DAU-8100A-L-SC | 6    | 100mm           |
| DAU-8100A-R-SC | 6    | 100mm           |

### Outline Drawing

(in: mm)



(Reference)  
Configuration Image of the Unit

| Part Number | Axis                     | X            | Y            | Z            | $\theta_x$              | $\theta_y$              | $\theta_z$              |
|-------------|--------------------------|--------------|--------------|--------------|-------------------------|-------------------------|-------------------------|
| DAU-8100A-L | Part Number              | TAMM100-50C  | TAMM100-50CR | TAMM100-50CR | OSMS-40A60R             | OSMS-60A10S             | OSMS-60A85R             |
|             | Travel                   | 50mm         | 50mm         | 50mm         | $\pm 5^\circ$           | $\pm 7^\circ$           | $\pm 9^\circ$           |
|             | Resolution (Full)        | 2 $\mu$ m    | 2 $\mu$ m    | 2 $\mu$ m    | $\approx 0.00217^\circ$ | $\approx 0.00189^\circ$ | $\approx 0.00229^\circ$ |
|             | Resolution (Half)        | 1 $\mu$ m    | 1 $\mu$ m    | 1 $\mu$ m    | $\approx 0.00108^\circ$ | $\approx 0.00095^\circ$ | $\approx 0.00115^\circ$ |
|             | Positioning Accuracy     | <6 $\mu$ m   | <6 $\mu$ m   | <6 $\mu$ m   | -                       | -                       | -                       |
|             | Positional Repeatability | <1 $\mu$ m   | <1 $\mu$ m   | <1 $\mu$ m   | < $\pm 0.004^\circ$     | < $\pm 0.004^\circ$     | < $\pm 0.004^\circ$     |
| DAU-8100A-R | Part Number              | TAMM100-50CR | TAMM100-50C  | TAMM100-50C  | OSMS-40A60              | OSMS-60A105R            | OSMS-60A85              |
|             | Travel                   | 50mm         | 50mm         | 50mm         | $\pm 5^\circ$           | $\pm 7^\circ$           | $\pm 9^\circ$           |
|             | Resolution (Full)        | 2 $\mu$ m    | 2 $\mu$ m    | 2 $\mu$ m    | $\approx 0.00217^\circ$ | $\approx 0.00189^\circ$ | $\approx 0.00229^\circ$ |
|             | Resolution (Half)        | 1 $\mu$ m    | 1 $\mu$ m    | 1 $\mu$ m    | $\approx 0.00108^\circ$ | $\approx 0.00095^\circ$ | $\approx 0.00115^\circ$ |
|             | Positioning Accuracy     | <6 $\mu$ m   | <6 $\mu$ m   | <6 $\mu$ m   | -                       | -                       | -                       |
|             | Positional Repeatability | <1 $\mu$ m   | <1 $\mu$ m   | <1 $\mu$ m   | < $\pm 0.004^\circ$     | < $\pm 0.004^\circ$     | < $\pm 0.004^\circ$     |