

# Network Modules

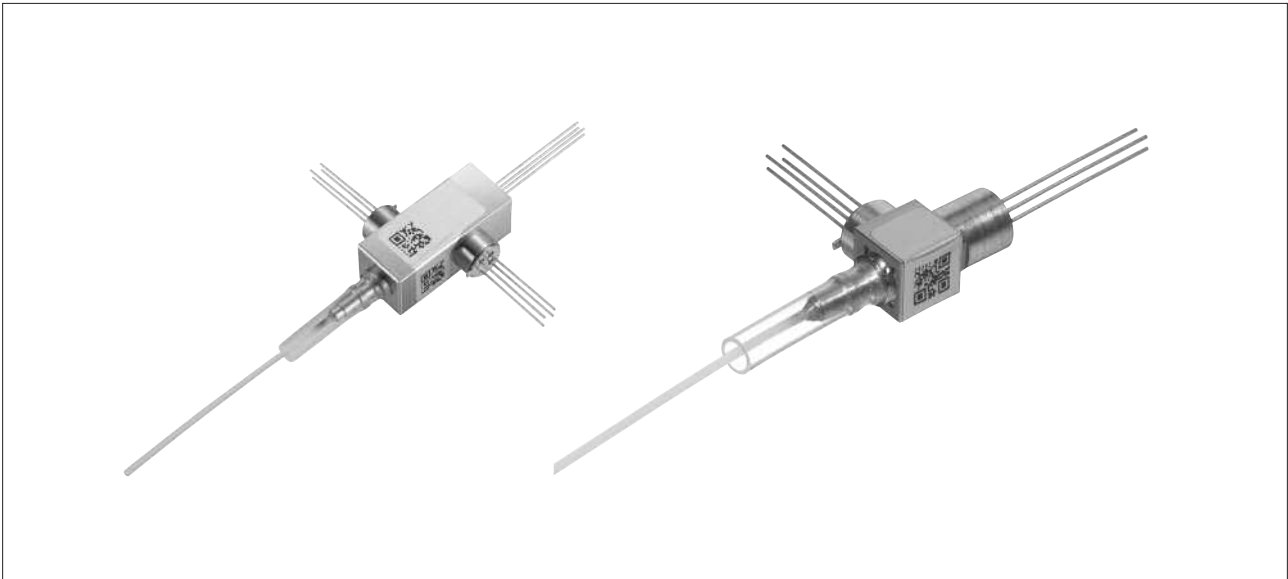
Original optical technology enables single core bidirectional modules with high output power and low crosstalk.

Aspherical Molded Glass Lenses with Metal Holder

Micro Aspherical Glass Lenses (for V-GROOVE)

Square Aspherical Glass Lenses

Network Modules



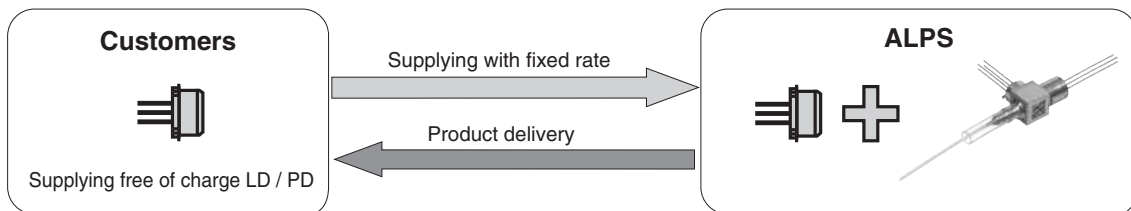
## Features

- Our unique aspheric lenses enable high fiber output.
- Applies Alps optical multi-layer thin film filter.
- Unique optical technology is applied to provide low cross talk.
- Highly reliable fixing through YAG laser welding.
- Smaller space required for the substrate.

## Applications

- Network access systems such as passive optical networks (PON)
- Optical line terminals(OLT)and Optical network units (ONU), etc.

## Supplying LD/PD or custom adjustment when specified



## General Specifications

|                       |                        |
|-----------------------|------------------------|
| Operating temperature | 0°C to +70°C           |
| Storage temperature   | -40°C to +85°C         |
| Hermeticity           | Non hermetic structure |
| Optical fiber         | Single mode fiber      |
| Connector type        | FC/SC/MU               |

ONM specifications

| Model   | Optical output (mW) | Wavelength ( $\lambda$ ) |                    | Optical crosstalk (dB) | Note  |
|---------|---------------------|--------------------------|--------------------|------------------------|---|
|         |                     | Transmission side(nm)    | Reception side(nm) |                        |   |
| FLUH1L□ | 1.3                 | 1310                     | 1490/1550          | 47                     | for PON-ONU Triplexer LD straight installation type |
| FLUE4Z□ | 3.0                 | 1490 (1550)              | 1310               |                        | for GPON, GEAPON-OLT LD straight installation type  |

Aspherical Molded Glass Lenses with Metal Holder

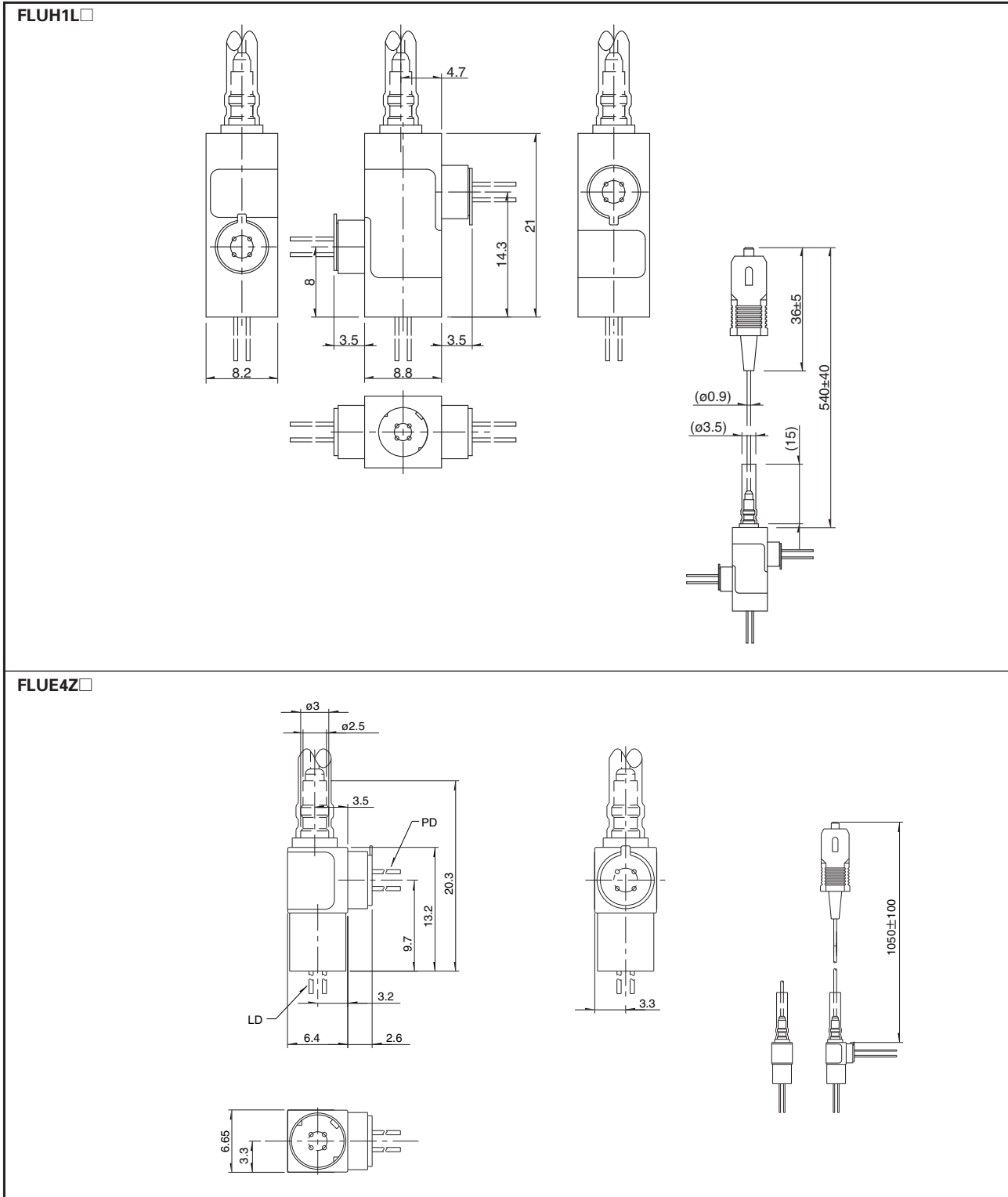
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Dimensions

Unit: mm



For terms NA, LD, PD, C/G, CW, lens holder, refer to terminology on P.16

# Network Modules Custom Request Sheet

Fill in the essential items and fax it to us at the number shown below.

※Please understand we may not always be able to meet your request.

TO: Alps Electric Co., Ltd.  
Magnetic Devices Sales Dept.

**FAX : 03-3726-5602**  
**(+81-3-3726-5602)**

Company \_\_\_\_\_

Department \_\_\_\_\_

Name \_\_\_\_\_

TEL \_\_\_\_\_ FAX \_\_\_\_\_

Aspherical Molded  
Glass Lenses  
with Metal Holder

Micro Aspherical  
Glass Lenses  
(for V-GROOVE)

Square  
Aspherical  
Glass Lenses

Network  
Modules

## Network Modules Request Sheet

| No. | Items              | Requested Specification |        | Standard                                   | Selected Value                     |
|-----|--------------------|-------------------------|--------|--|------------------------------------|
| ①   | LD                 | ( )                     |        | φ 5.6 LD                                   | —                                  |
| ②   | PD                 | ( )                     |        | φ 5.6 PD                                   | —                                  |
| ③   | Tx. Rx. Wavelength | Tx                      | Rx     | 1310nm Tx/1550nm Rx<br>1550nm Tx/1310nm Rx | —                                  |
|     |                    | ( ) nm                  | ( ) nm |  |                                    |
| ④   | Optical output ※1  | ( ) mW ± ( ) mW         |        | 2.5mW                                      | —                                  |
| ⑤   | Responsivity ※2    | ( ) A/W ± ( ) A/W       |        | 0.8A/W                                     | —                                  |
| ⑥   | Cross talk         | ( ) dB                  |        | ≥ 47dB                                     | —                                  |
| ⑦   | Connector type     | ( ) Connector           |        | SC type<br>MU type                         | —                                  |
| ⑧   | Fiber length       | ( ) mm ± ( ) mm         |        | 1,000mm ± 100mm                            | 1,000mm ± 100mm<br>2,000mm ± 100mm |
|     |                    | ( ) mm ± ( ) mm         |        |  |                                    |

※1 Values entered in "Standard" and "Selected Value" columns are optical output for a module that incorporates a LD with a rated optical output of 5 mW. In the case of a LD with a different rated optical output, the optical output of the modules will vary proportionally.

※2 Values entered in the "Standard" column are optical reception sensitivity for ac modules that incorporates a PD with a rated optical reception sensitivity of 0.9 A/W. If the case of a PD with a different rated light reception sensitivity, the optical reception sensitivity of the modules will vary proportionally.

Other requests : other specifications etc.