User's Manual

Model 735383-A001, A002
NA Conversion Adapter

Thank you for purchasing this NA conversion adapter, which is an optical spectrum analyzer accessory.
To ensure correct use, please read this manual thoroughly before beginning operation.
After you have finished reading this manual, keep it in a safe place.

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To Use the Product Safely

Be sure to follow the safety precautions listed below. Yokogawa Meters & Instruments Corporation assumes no liability for the customer's failure to comply with these requirements. Before you use the NA conversion adapter, read the measuring instrument's user's manual to completely familiarize yourself with the specifications and operations of the measuring instrument.

Be sure to follow the safety precautions listed below. Failing to do so may lead to damage to the conversion adapter.

CAUTION

There are optical lenses installed in this product. Be careful when handling this product, because impacts, such as those that occur when the product is dropped, may damage the product's internal parts.

Conventions Used in This Manual

CAUTION Calls attention to actions or conditions that could cause light injury to the user or cause damage to the product or user's data, and precautions that can be taken to prevent such occurrences.

Note Calls attention to information that is important for proper operation of the product.

1. Product Overview

This NA conversion adapter converts the NA of the connected optical fiber to a value that is approximately 1/2 of the fiber's NA and then transmits the converted light.

Model	Suffix Code	Name
735383	-A001	NA conversion adapter (for GI 50 optical fibers)
	-A002	NA conversion adapter (for GI 62.5 optical fibers)

2. Basic Construction

There are lenses installed in the adapter. The image magnification of the lenses has been adjusted so that the transmitted NA is approximately 1/2 of the NA that is received. Therefore the size of the image at the end face of the NA conversion adapter's optical output is approximately twice the core diameter of the connected optical fiber.

3. Usage

Connect this adapter to the optical input section of an AQ6370 series optical spectrum analyzer. This enables you to efficiently apply light that travels through an optical fiber with a large NA to an optical spectrum analyzer.
For example, by connecting a GI 50 optical fiber—which has a comparatively large NA—to the NA conversion adapter and connecting the adapter to an optical spectrum analyzer, you can reduce the loss that occurs at input and improve the stability of optical level measurements.

4. How to Use

Connect this adapter to the optical input section of an optical spectrum analyzer.

■ Compatible Optical Fibers

- GI 62.5 multi-mode optical fibers (-A002 Only)
- GI 50 multi-mode optical fibers (-A001, -A002)
- Single-mode optical fibers (-A001, -A002)

Note

- You must use a polished PC optical fiber connector (FC type) or equivalent.
- Before you connect the optical fiber connector to the NA conversion adapter, be sure to clean the ferrule and the ferrule tip.
- You can perform approximately 200 sets of connection and disconnection operations.

■ Compatible Spectrum Analyzers

The adapter can be used with the following AQ6370 series optical spectrum analyzers.
AQ6370, AQ6370B, AQ6370C, AQ6373, and AQ6375 (only up to 1700 nm)

Note

This product is a dedicated accessory for the AQ6370 series optical spectrum analyzers. Only use it for its intended purpose.

■ Recommended Resolution Settings for Optical Fibers

If you have connected a GI 50 multi-mode optical fiber or a GI 62.5 multi-mode optical fiber to an optical spectrum analyzer through the NA conversion adapter, we recommend that you set the resolution of the optical spectrum analyzer to 0.2 nm or higher.
If you have connected a single-mode optical fiber to an optical spectrum analyzer through the NA conversion adapter, we recommend that you set the resolution of the optical spectrum analyzer to 0.1 nm or higher.

5. Guaranteed Optical Spectrum Analyzer Measurement Accuracy

When you have connected the NA conversion adapter to an optical spectrum analyzer, we cannot guarantee that the optical spectrum analyzer will behave according to its product specifications.
In particular, note that the absolute value of the optical level is incorrect (the measured level will be higher than the actual level).

6. Cleaning Method

You can use normal optical fiber cleaner to clean the product.

7. Specifications

Optical connector type: FC
NA conversion ratio: Approximately 1/2
Size: 29.7 mm long, 9.8 mm in diameter
Weight: Approximately 8 g

External Dimensions