

# OSA: Repeated Measurement in Receiving and Shipping Inspection

## Applicable model\*: AQ6370 series/AQ6360

In the acceptance inspection of purchased parts and the shipping inspection of optical products, it is repeatedly tested whether the DUT meets the specifications. However, complicated tasks such as setting measurement conditions, recording measured values, and judging pass / fail must be repeated. In such a case, by automating the measurement, analysis, and judgment processes, inspection time can be shortened and judgment accuracy can be improved.

The applicable models are equipped as standard with a template function that makes it easy to make pass / fail judgments and comparisons with reference data, and a program function that makes automatic measurement easy. By utilizing these functions, work efficiency of repeated tests can be improved without using an external PC.

### ■ Template function (Pass/Fail judgment)

The template function automatically judges pass / fail by comparing the measured waveform with the preset reference data.

Create and register the template data (upper and lower limit lines) that will serve as the judgment criteria. OSA uses the registered template data to automatically determine whether the measured waveform is within the criteria. The pass / fail judgment result is displayed as "PASS" or "FAIL" on the screen, and can also be acquired by a remote command. For visual inspection, the template can be used to display a reference spectrum as a guide to the measured waveform. Templates can be easily created on OSA or PC, and can be saved and read as CSV format files, so multiple OSAs can share the template.

### ■ Program function

This is a function to create and register a series of measurement procedures as a program in advance and perform automatic measurement by itself.

Creating a program is very easy because you can select the command corresponding to the OSA key as if you were actually operating OSA. In addition, commands for loop control, condition judgment, variables, four arithmetic operations, parameter input, screen output, etc. are prepared for advanced programming.

It also supports remote control via ETHERNET or RS232, allowing direct control of external devices such as connected light sources and optical switches. Complex measurements such as repeated measurements while changing external measurement conditions can be easily performed without a PC.

Template function



Program function

```
YOKOGAWA // AQ6370D OPTICAL SPECTRUM ANALYZER
PROGRAM ED
PROGRAM NAME: Thresh_3dB_ Auto_Save
001 INIT
002 AUTO
003 STOP
004 RESOLUTION WL 0.100nm
005 SENS HIGH
006
007 SINGLE
008 SPEC WD THRESH 3.00dB
009 WRITE GRAPH INT
010 WAIT 300s
011 GOTO 7
012
013
014
```

\* All versions unless otherwise specified.