

Operation Guide

AQ4280

Optical Light Source

YOKOGAWA ◆ 1st Edition: October 2012(YMI)
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Yokogawa Meters & Instruments Corporation

IM AQ4280-02EN
1st Edition

Model	AQ4280A	AQ4280B	AQ4280C
Light emitter	LD		
Compliant fiber	SM (ITU-T G.652)		
Center wavelength [Ⓞ]	1310/1550±20 nm	1310/1550±20 nm 1490±10 nm	1310/1550±20 nm 1490/1625±10 nm
Spectral width ^{ⓄⓄ}	<5 nm(1310 nm) <10 nm(1550 nm)	<5nm (1310 nm, 1490 nm) < 10 nm(1550 nm)	<5 nm(1310 nm, 1490 nm, 1625 nm) <10 nm(1550 nm)
Optical output level [Ⓞ]	-5 dBm±1 dB	-5 dBm±1 dB	-5 dBm±1 dB
Level stability (15min) ^{ⓄⓄ}	<±0.05 dB	<±0.05 dB (1310/1550nm) <±0.1 dB (1490 nm)	<±0.05 dB (1310/1550 nm) <±0.1 dB (1490/1625 nm)
Modulation Mode	CW, CHOP(270Hz, 1kHz, 2kHz)		
Optical Connector	FC, SC, ST		
Power supply	Dry and Rechargeable Battery AA		
Battery life [Ⓞ]	Approximately 25 hours		
Power saving	Power turns off automatically when there is no key input for approximately 10 minutes (this function can be disabled)		
Battery check	Battery indicator		
Environmental conditions	Operating temperature range:-10~50°C, Operating humidity range:20~80% Storage temperature range:-20~+70°C(no condensation) Storage humidity range:5~95%(no condensation)		
Laser Class	CLASS1(IEC 60825-1)		
Dimensions and weight [Ⓞ]	76(W)×153(H)×43(D) mm, Approximately 300 g		

Ⓞ Modulation Mode: CW, ambient temperature: 23 ±2°C Ⓞ RMS (2σ, -20 dB)

Ⓞ In the case of the PC/FC 2m code connection

Ⓞ Continuation Measurement, using alkaline dry cells, at 23°C ±2°C Ⓞ A protector is removed.

Note : Specifications are at 23°C±2°C unless otherwise noted. Optical connector: FC/PC

2

Introduction

The AQ4280 series Optical Light source offers excellent stability, portability and facile adjustments for accurate optical fiber testing.

AQ4280 series can be used to test single mode optical fiber of long distance and local network. Also it can work with optical power meter to measure the loss of optical fiber.

Features

- Easy-to-use, straight forward operation
- Eye-catching handheld package
- LCD backlight for easy operation in darker environments



1

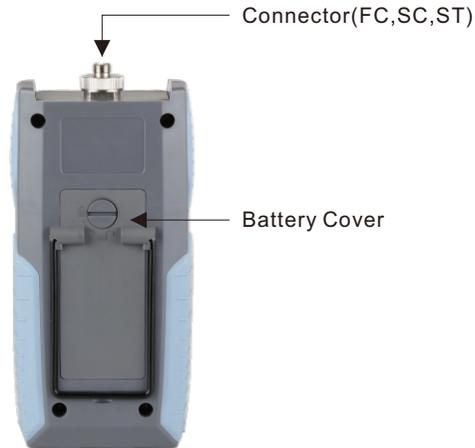
Operation



No.	Key	Function
1	ON/OFF	Switches Instrument on/off. Long Key press over 2 seconds while powering on to activate the instrument without Auto-off function.
2	SHIFT	Select CH1, CH2(Only AQ4280C), CH1 and CH2 can emit light independently. ⚠ CH which is not used should stop light emitting.
3	WAVELENGTH	Modulated Wavelength Shifting Key: Switches modulated wavelength and continuous wavelength.
4	WAVELENGTH (λ)	AQ4280A: 1310nm, 1550nm AQ4280B: 1310nm, 1490nm, 1550nm AQ4280C: 1310nm, 1550nm + 1490nm, 1625nm
5	TWIN	SINGLE: Auto-wavelength recognition is off. TWIN: Auto-wavelength recognition is on.
6	BACKLIGHT	Switches backlighting on/off.

3

Back



Consumables

We recommend that you replace the Universal and connector adapters when used 1000 times. The recommended replacement interval can vary greatly depending on the operating environment and the frequency of use. The times are estimated. The accessories are out of warranty.

Maintenance

- Please cover the protective dust cap once you finish using.
- It is a good idea to clean the connector and the instrument when they get dirty through use. Optical cleaning pads and anhydrous alcohol is recommended. And please be careful not to get the detergent inside the instrument.
- Periodic calibration is an effective means of keeping the instrument performing correctly for a long time and of detecting malfunctions at an early stage.
- We recommend that you have the AQ4280 calibrated once a year.
- Prohibitions against Actions that Cause Leaking, Ignition and Explosion.
- Do not leave it in a location that is exposed to direct sunlight.
- Do not throw the battery into fire or heat it.
 - When you put the battery in the battery case, make sure that the battery is facing the right direction.
- If you will not use the battery for an extended period of time, remove it from the AQ4280 and store it in a dry place.
- Please do not stare into beam.

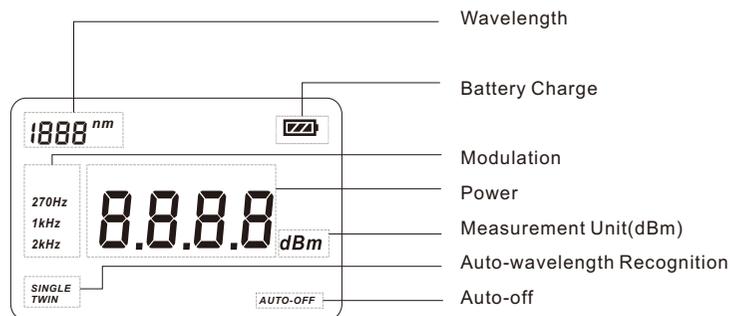
Notes

1. The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functionality. The figures given in this manual may differ from those that actually appear on your screen.
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LCD



This operation guide focuses on the handling precautions, basic operations, and specifications of the AQ4280.

In addition to this operation guide, the following additional user's manuals for the AQ4280 are provided on the included CD-ROM:

the User's Manual, IM AQ4280-01EN, that explains all the AQ4280 features.

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