BROADCOM®

Data Sheet

Slit Evaluation Kit AFBR-S20SK-V2

Interchangeable slits – Change the entrance slit of your spectrometer and, therefore, change the optical performance.

Overview

Start your optical analysis right away with the spectrometer slit evaluation kit. This kit gives you the chance to increase the spectral sensitivity of your Qmini or Qwave spectrometer (AFBR-S20W2XXX + AFBR-S20M2XXX).

This kit includes four SMA adapters with integrated entrance slits of 50 µm, 100 µm, 150 µm, and 200 µm, as well as a socket screw key and instruction manual.

Package Contents

- 50 µm slit
- 100 µm slit
- 150 µm slit
- 200 µm slit
- Instruction manual
- Hexagon socket screw key

Part Number	Module	Wavelength Range	Expected Resolution (FWHM)				
			20 µm (default)	50 µm	100 µm	150 µm	200 µm
AFBR-S20W2UV	Qwave UV	220–390 nm	0.3	0.6	1.2	1.8	2.4
AFBR-S20W2VI	Qwave VIS	350–880 nm	0.6	1.2	2.4	3.6	4.8
AFBR-S20W2NI	Qwave NIR	700–1030 nm	0.5	1	2	3	4
AFBR-S20M2UV	Qmini UV	220–400 nm	0.5	1	2	3	4
AFBR-S20M2VI	Qmini VIS	370–750 nm	0.8	1.6	3.2	6.4	12.8
AFBR-S20M2NI	Qmini NIR	730–1080 nm	0.8	1.6	3.2	6.6	12.8
AFBR-S20M2WU	Qmini WIDE UV	225–1000 nm	1.5	3	6	9	12
AFBR-S20M2WV	Qmini WIDE VIS	225–1000 nm	1.5	3	6	9	12
AFBR-S20M2VN	QMINI VIS/NIR	480–1100 nm	1.5	3	6	9	12

All values in the table are typical values if not marked with “min., max., <, >”.
Test condition: ambient temperature = 25°C.

A broader slit makes your spectrometer more sensitive, but the resolution decreases.

Identification

The slit width is engraved on the SMA connector in the dimension of millimeters (for example, 0.10 = 100 µm). The 20-µm entrance slit is the standard slit and has no engraving on it.

Additional Color Marks

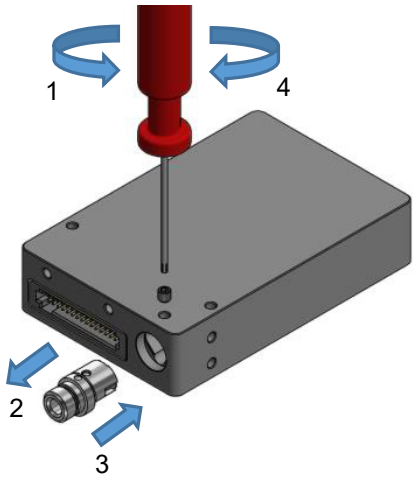
50 µm	Green
100 µm	Orange
150 µm	Red
200 µm	Brown

Figure 1. Components

Installing the SMA Connector

1. Remove the screw on the bottom of the spectrometer using the included hexagon screw driver.
2. Carefully pull out the installed SMA connector.
3. Take a new SMA connector with the required slit width and place it into the housing. The engraving of the slit width has to face the bottom side.
4. Fix the new SMA connector with the hexagon screw driver and tighten it carefully.

Figure 2. Installing the SMA Connector



Additional Information

- Do not exchange the 20-µm slit between different spectrometers. Just place it in the original one to keep the factory calibration valid.
- After changing the slit width to a larger size, a recalibration is only necessary if you need a precise wavelength measurement.
- This tool is for evaluation only. For higher volumes, Broadcom® offers AFBR-S20W2XXX and AFBR-20M2XXX with the chosen slit.

In case of questions, contact Broadcom at support.spectrometer@broadcom.com

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For more product information: broadcom.com

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