

From: [Poenar Daniel Puiu \(Assoc Prof\)](#)
To: [Sin Hui Tong](#)
Subject: RE: Edmund Optics: Sales Support : SG - 38350
Date: Thursday, 10 June 2021 3:33:00 PM

Dear Sin Hui Tong,

Yes, then can use the part(s) indicated by you. Please choose for each the largest size (i.e. largest surface area) you have, if possible/available square (or rectangular). If not, then the circular one, but please indicate this in the quotation.

The quantities/number of pieces can be considered the minimal for which you accept quotation/order. If you can mention per piece is good, if you need say min.10 pieces then you put 10 pieces in the quotation but of course indicate that the cost is for 10 pieces.

Additionally, I would also be interested in the following:

1. Bundle of multimode fibers:
 - a. one with very good transmission in UV (again, in the same range between 230 nm and 380 or 400 nm)
 - b. one with very good transmission in the visible range (between approx. 380 or 400 nm and 750...780 nm)
2. Some focusing lenses, again for the same two ranges listed above (UV + vis)
3. Detectors for the two indicated ranges. For vis probably can use a line array of APDs (if you have), but for UV it is much more problematic. Ideally, it would be excellent if I could find a line array of APDs operating at such short wavelengths (or at least with their peak response at ~400 nm or 450 nm), but as far as I know they usually peak their responsivity at ~800 nm, which is way too far away for me. Of course, a separate discrete/stand-alone detector optimized for each range can be considered, including PMTs, although those are bulky and very expensive.

Thank you very much!

With best wishes,
Daniel

From: Sin Hui Tong <shtong@edmundoptics.com.sg>
Sent: Tuesday, 8 June 2021 4:06 PM
To: Poenar Daniel Puiu (Assoc Prof) <EPDPuiu@ntu.edu.sg>
Subject: RE: Edmund Optics: Sales Support : SG - 38350

Hi Daniel

Please see below my answer in **RED**
Kindly let us know the part number and the quantity you need for quotation.

Thank you

Sin Hui, TONG | Sales Engineer

Edmund Optics Singapore Pte. Ltd.

p: +65.6273.6644 ext. 5539



The Future Depends on Optics

From: Poenar Daniel Puiu (Assoc Prof) <EPDPuiu@ntu.edu.sg>

Sent: Tuesday, June 8, 2021 2:55 PM

To: Sin Hui Tong <shtong@edmundoptics.com.sg>

Subject: RE: Edmund Optics: Sales Support : SG - 38350

Importance: High

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Dear Sin Hui Tong,

It seems that the filter you showed is a good choice. In the Excel file, the meaning of the columns B, C & D is "Average", "s polarization" & "p polarization", respectively? **Yes you are correct.**

The dimension is still not very clear for our design but let's consider the largest one, 25.2 x 35.6mm.

<https://www.edmundoptics.com.sg/p/400nm-252-x-356mm-dichroic-longpass-filter/24163/>

Please check the link above for filter in 25.2 x 35.6mm. Kindly let us know how many pieces do you need for quotation.

Also, I am interested in a good mirror with very high R (>90%, if possible even >95% thigh this may not be feasible practically?) in the UV, in the same range between 230 nm and 380 or 400 nm, while at the same time having reasonable reflectivity in the visible.

Although the reflectivity of a dielectric mirror can be excellent and probably close to 99%, but I don't think a dielectric mirror can cover such a broad range (but maybe you double check and tell me if I am wrong). **you are correct, for broadband UV we will recommend enhanced Aluminium coating. Average R>89% from 250-240nm, Avg R> 85% from 250-700nm**

I think an enhanced Al mirror is the most feasible practical solution, like #33-913. So if indeed there is no dielectric mirror that can cover the desired broad range, please include the #33-913 mirror in the quotation as well.

As wavelength you will be using is from 230nm, you can consider this item instead, this part is with the same family as 33913

<https://www.edmundoptics.com.sg/p/25mm-diameter-deep-uv-enhanced-mirror/8814/>

Actually, regarding this last one (#33-913) I have 2 more Qs:

- a. What is the substrate?? It is not mentioned in your website... Is it fused silica? If not, can it be made to be fused silica?

It is made in fused silica, the substrate is shown on the website

<https://www.edmundoptics.com.sg/p/25mm-diameter-vacuum-uv-enhanced-mirror/3367/>

- b. Can it be made as a convex mirror, not spherical, but cylindrical?

We still do not have the capability to make cylindrical surface in house.

If the answers to both the Qs above is "Yes", then please also include it in the quotation (together with the simple flat one, just for comparison).

Thank you very much!

With best wishes,

Daniel

From: Sin Hui Tong <shtong@edmundoptics.com.sg>

Sent: Tuesday, 8 June 2021 11:35 AM

To: Poenar Daniel Puiu (Assoc Prof) <EPDPuiu@ntu.edu.sg>

Subject: RE: Edmund Optics: Sales Support : SG - 38350

Hi Daniel

Thank you for your reply

Please take a look on this dichroic long pass filter:

<https://www.edmundoptics.com.sg/p/400nm-125-x-176mm-dichroic-longpass-filter/24141/>

I have attached the transmission/reflection of the part from 200nm, please refer to attached file.

Kindly let us know if this is the part that you are looking for, the part come in dimension Dia 12.5mm, 12.5 x 17.6mm, Dia 25.0 and 25.2 x 35.6mm.

Thank you

Sin Hui, TONG | Sales Engineer

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The Future Depends on Optics

From: Poenar Daniel Puiu (Assoc Prof) <EPDPuiu@ntu.edu.sg>

Sent: Monday, June 7, 2021 6:48 PM

To: Sin Hui Tong <shtong@edmundoptics.com.sg>

Subject: RE: Edmund Optics: Sales Support : SG - 38350

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Dear Mr. Sin Hui Tong,

For the moment I am just building up the budget for a project proposal so the discussion is just in principle.

1. Yes, can consider an amount of 30 pieces

2. Not sure, probably will be (IF the project twill be approved, of course!)
3. Fluorescent investigation of contaminants in water

Hope this give you the required info.

Best wishes,

Daniel

From: Sin Hui Tong <shtong@edmundoptics.com.sg>
Sent: Monday, 7 June 2021 6:10 PM
To: Poenar Daniel Puiu (Assoc Prof) <EPDPuiu@ntu.edu.sg>
Subject: RE: Edmund Optics: Sales Support : SG - 38350

Hi Daniel

Thank you for contacting Edmund Optics.

Before we go into the detail of the specification, I would like to know more information from you

1. There will be minimum order quantity for all custom part. Normally it will be 25-30 pieces.
Is this acceptable?
2. Is this a one time order?
3. What is the application the part will go into?

Please let us know more information before we can proceed.

Thank you

Sin Hui, TONG | Sales Engineer

Edmund Optics Singapore Pte. Ltd.

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The Future Depends on Optics

From: eo-service@edmundoptics.com <eo-service@edmundoptics.com>
Sent: Monday, June 7, 2021 5:20 PM
To: Sales Support (EOSG) <sgsales@edmundoptics.com.sg>
Subject: Edmund Optics: Sales Support : SG - 38350

Edmund Optics: Sales Support : SG - 38350

Reason for Contact:	Sales Support
Country:	Singapore
First Name:	Daniel
Last Name:	POENAR
Company:	EEE School NTU

Job Title: Assoc.Prof.
Phone Number: 67904237
Ext:
Email Address: epdpui@ntu.edu.sg
Military/Defense Related?: False
Has Dual Use/Export Control items?: False
Comments: Dear Lady/Sir, I am an Assoc.Prof. in the EEE School of NTU. I would like to know if you have available or if it is possible for you to fabricate a UV-vis long-pass dichroic mirror, although maybe a more appropriate name would be edge filter because the ideal desired operation should be for an AOI of 0°, NOT 45° as is typical with normal applications for dichroic mirrors (e.g. in a filter cube). The specs for this filter are: high reflectivity (R>90%) in the UV (between 230 nm and 380 or 400 nm) and high transmissivity (T>90%) in the visible range (between approx. 380 or 400 nm and 750...780 nm). If the latter too tough, the vis range transmission window's long limit wavelength can be reduced down to 600 nm or even 550 nm if really necessary. If you have/can do it, then please kindly send me quotation for it, including the cost of packaging & shipping. Thank you for your help and am looking forward for your quick feedback ! With best wishes, Poenar Daniel

Referring Page URL: <https://www.edmundoptics.com/f/dichroic-longpass-filters/14288/>

User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.77 Safari/537.36 Edg/91.0.864.41

UserIp: 116.88.213.19, 162.158.165.132

(06/07/2021 09:19 AM EST)

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