

Reflection Probes with Small Tips

For some medical and semiconductor applications, a (very) small tip is desired to do reflectance measurements. Avantes offers two standard diameters of small tip reflection probes, 1.5 and 2.5 mm and each tip is normally 100 mm long.

The probe is configured with an illumination leg with six 200 µm fiber cables which connects to a fiber coupled light source

and a single 200 µm read fiber cable to measure the reflection via connection to a spectrometer.

A special angled fiber holder (AFH-15) is available for the 1.5 mm diameter reflection probe. This device enables reflection measurements under angles of 15, 30, 45, 60, 75 and 90 degrees. For more information, see 'Reflection probe holders'.



Technical Data

Fibers	7 fibers 200 µm core, 6 light-fibers, 1 read fiber, N.A.= 0,22. Standard 2 m length, splitting point in the middle.
Wavelength range	200-2500 nm (UV/VIS/NIR)
Connectors	SMA-905 connectors (2x)
Probe end	Stainless steel cylinder, 100 mm long x 1.5 or 2.5 mm diameter.
Jacketing	The optical fibers are protected by a Kevlar reinforced PTFE jacket with PVC sleeving. OD: 3.8 mm
Temperature	-20°C to 65°C
Bending	Minimum bend radius: Short term (few seconds) 20 mm, long term: 120 mm



Ordering Information

- FCR-7UVIR200-2-1.5x100** • Reflection probe, 1.5 mm tip, UV/VIS, 7 x 200 µm broadband fibers, 100 mm long, 2 m length, SMA
- FCR-7UVIR200-2-2.5x100** • Reflection probe, 2.5 mm tip, UV/VIS, 7 x 200 µm broadband fibers, 100 mm long, 2 m length, SMA

For diffuse or specular reflection measurements, take a look at the RPH-1 reflection probe holder