

Reflection Probes with Reference

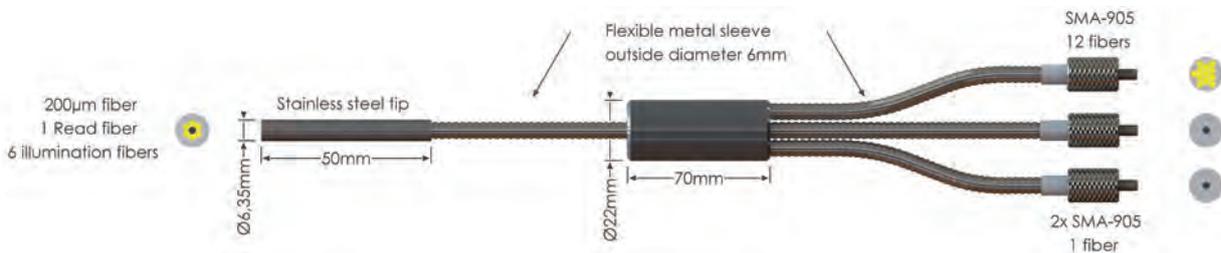
In order to correct fluctuations and drift from your light source, periodic referencing is required. To facilitate this, Avantes offers this series of reflection probes with a self-referencing feature. The light coming from the light source is bundled into 12 fibers, which are split into two 6 fiber

bundles. One of these bundles is carried to the probe end for sample measurements and the other bundle of 6 are directed to a white reflection tile built into the probe to provide a light source reference. This reference leg is connected to a slave spectrometer channel dedicated to light source

referencing or may be routed to a single channel via a fiber-optic (contact a Sales Engineer about this special configuration). On the measurement side the probe end has a 7th fiber which reflects light back to the master spectrometer channel.

Technical Data

Fibers	14 fibers 200 µm core, 12 light-fibers, 2 x 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 (3x)
Probe end	Stainless steel 316 cylinder, 50 mm long x 6.35 mm diameter . Optionally -PK for PEEK or -HY for Hastelloy® C276 (on request).
Jacketing	The optical fibers are protected by a silicon inner tube and a flexible stainless steel (BX, O.D. 6.0 mm) or chrome plated brass (ME, 5.0 mm) outer jacket. The jacketing also gives stress relieve.
Temperature	-30°C to 100°C. (-HT version 200°C)
Pressure	Probe head 50 bar @ 25°C
Bending	Minimum bend radius: Short term (few seconds) 20 mm, long term: 120 mm



Ordering Information

- FCR-14UVIR200-2-REF-BX/ME***
- Reflection probe with reference, 14 x 200 µm broadband fibers, 2 m length, SMA term.

* please specify jacket material

Options

- HT • High Temperature version (up to 200°C)