

## DATASHEET

# NIR and IR optical fibers



Our FT Rocket fibered spectrometers can be used with the following NIR and IR fiber cables that Arcoptix can provide. Standard fiber connectors are SMA-905 on both sides, and the fibers are protected by a polymer jacket. Other connectors or protections are available on request.

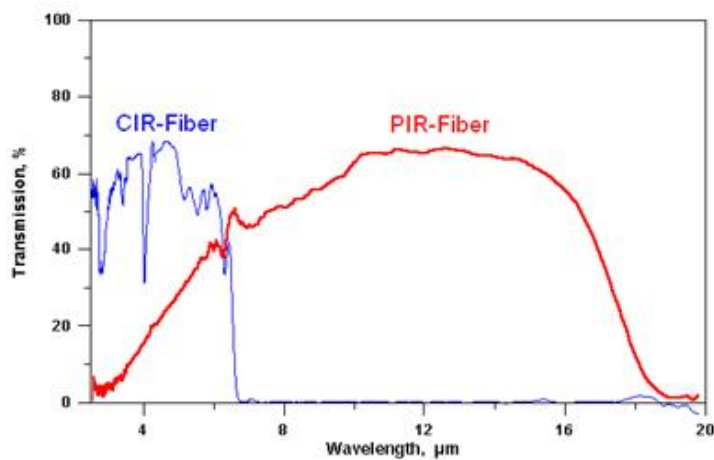
### Specifications

	NIR	CIR	PIR
<b>Transmission spectral range</b>	0.4-2.6 $\mu\text{m}$ (25'000-3'800 $\text{cm}^{-1}$ )	1-6 $\mu\text{m}$ (10'000-1'600 $\text{cm}^{-1}$ )	3-18 $\mu\text{m}$ (3'300-550 $\text{cm}^{-1}$ )
<b>Material</b>	Low-OH fused silica	Chalcogenide glass	Polycrystalline glass
<b>NA</b>	0.22	0.3	0.3
<b>Core diameter [<math>\mu\text{m}</math>]</b>	600, 1000	500	900
<b>Core refractive index</b>	1.44	2.4	2.15
<b>Max operating temperature</b>	125	100	140
<b>Minimal bending radius [mm]</b>	100, 120	100	130
<b>Standard lengths [m]</b>	0.25, 0.5, 1.0	1.0	1.0

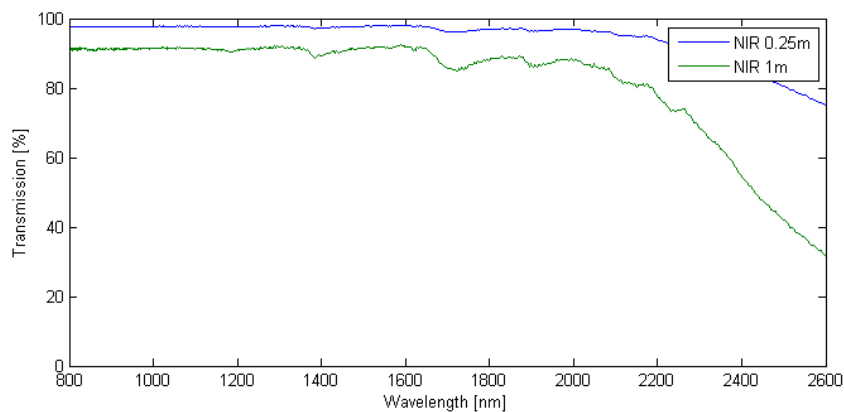
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### ▪ Spectral transmission graphs

Spectral transmission of 1m long CIR and PIR fibers:

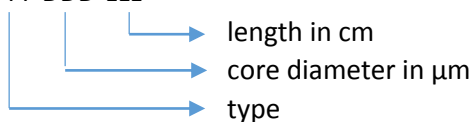


NIR fiber, 0.25m and 1m long:



### ▪ Ordering Information

FIB-TTT-DDD-LLL



Example: FIB-CIR-500-100: Chalcogenide infrared fiber, 500  $\mu\text{m}$  core diameter, length 100cm