

# Chalcogenide Fiber cable

Chalcogenide fiber is composed of Mid Infra-red transmitting arsenic sulphide glass. Standard fiber consists of core and cladding of different composition.

art photonics provides usually connectorized fibers with SMA or FC/PC connectors and flexible polymer or metal tubing to protect fiber from mechanical damage.

#### Specification of CIR cable materials

Material of the fiber	Arsenic sulphide glass
Protective tubing	PEEK or metal with PVC coating
SMA connectors	Brass
FC/PC connectors	Brass

Caution! The chalcogenide fiber can withstand not more than 80°C.

Please take care against overheating of the cable.

## 1. Handling Instruction

Handle CIR cable with care.

The cable contains chalcogenide fiber which is flexible but can be damaged at the shock of the connector or fiber protective sleeve. Also the bending radius of these fibers is limited, i.e., not less than

20cm diameter for CIR 500/550 fiber cable

15cm diameter for CIR340/400 fiber cable

10cm diameter for CIR 250/300 fiber cable.



Caution! The bending of the cable to less diameter can result in fiber break.

- Do not bend the cable less than specified diameter
- Put protective caps onto both ends of the cable when not in use
- Plug/unplug the cable by gripping the connector, not the cable jacket.
- · Hold the cable at both ends when transporting
- Prevent the drop of the cable when laying on the surface
- Prevent the springing the connectors onto the hard surface
- Avoid any scratches and notches of PEEK protective tubing
- Keep the cable in to original box when not in use
- Take care to insert the cable into the FC/PC adapter properly according the position key as shown at the photo.



### 2. Cleaning of CIR cable

The dust can be cleaned with a soft painting brush.

The fiber ends in SMA connectors can be cleaned using lint-free tissue with Isopropanol. After cleaning wipe off fiber end carefully.

Wipe also the side surface of the connectors as the dust from side surface can reach fiber end face.

Do not touch fiber ends with hard tool even through the napkin.

#### 3. Storage.

When the work using CIR cable is finished carefully remove the cable from adaptors. Do not strike the connectors because the shock can damage the fiber.

- Put protective caps onto connectors.
- Place the cable into the storage box when not in use or place it in a suitable location for a safe storage.