



Fiber Array Units

One-Dimensional Arrays for Coupling to Photonic Integrated Circuits

We design and manufacture precise fiber arrays for data centers and sensing applications. The arrays are widely configurable. Customers can specify many parameters such as number of channels, fiber pitch, fiber type, front face polishing type or outer dimensions. Fiber array units feature minimal fiber core offsets thanks to the use of our own extremely precise v-grooves and lids.

	SM Telcom Version	MM/PM/MCF/SM-SPEC*
Channels	specified by customer	
V-Groove/lid material	borosilicate glass, fused silica, silicon, metal	
V-Groove pitch [µm]	82, 127, 250 or customized	
Front face polishing [°]	0°, 8° or customized	
Operating wavelenght [nm]	1260-1650	400-1950
Connectors	MTP®, MT, MMC®, TMT, FC, LC, SC, E2000	
Anti-reflection / reflection coating	available on request	
Fiber core offset ** µm]	<0,7 (typ. 0,5)	<1 (typ. 0,7)
Extinction ratio [dB]	-	≥25 @ >630nm
Angle misalignment of stress rods [°]	-	±0,5
Operating temperature [°C]	-40 +85	-20 +70

H2
H1

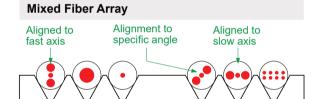
W1

V-groove

L1

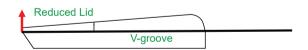
W2

^{*} Fiber type and manufacturer must be approved in advance ** Limited by number of channels



Is Populated with different fiber types within a single array according to customers' requests incl. PM fiber which is precisely oriented with high PER.

Low Profile Fiber Array for In-Plane Coupling



Front face is polished with an angle which provides vertical launch of the beam to a grating coupler on the chip.

Collimating Fiber Array



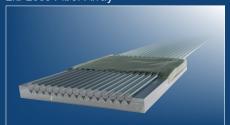
Actively aligned Micro Lens Array (MLA) to provide collimated beams with high pointing accuracy.

Lid-Less Fiber Array



Fibers are placed in v-grooves with a high precision without a lid or with a reduced lid covering the fibers.

Lid-Less Fiber Array



Fiber Array with Connector Interface



Short Fiber Array Jumper



SQS Vláknová optika a.s., Komenského 304, 509 01 Nová Paka, tel.: +420 493 765 111, fax: +420 493 721 017, email: sales@sqs-fiber.cz, www.sqs-fiber.cz Bank: Raifeisenbank a.s., branch: V Kopečku 72, Hradec Králové, account: 556677885/5500, SWIFT: RZBCCZPP, IBAN: CZ05 5500 0000 0005 5667 7885 VAT No.: CZ60913037, Reg. No.: 60913037, registration: Krajský soud v Hradci Králové, file number: B 2285, EKO-KOM client number: EK-F00022487