

KyLIA

THIN FILM COHERENT OPTICAL HYBRIDS

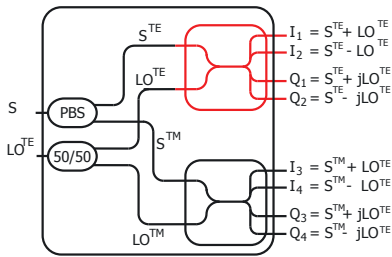
INTERFEROMETERS

COH COH-X single and dual polarisation 90° optical hybrid

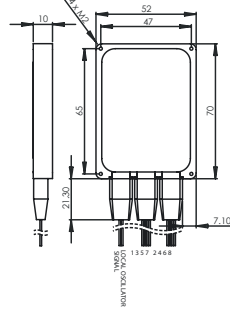


Single polarization optical hybrid enables to **extract phase and amplitude from a single polarisation signal** by performing four 90° phase stepped interferences between the signal and the Local Oscillator (LO). Based on two single polarization optical hybrids, dual polarization optical hybrid achieves the same functionality on both polarizations.

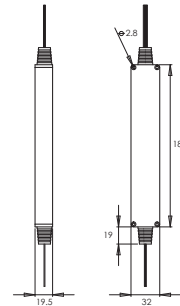
Principle drawing



COH24 / COH28 mechanical package



COH24-X / COH28-X mechanical package



parameter	unit	COH24	COH28	COH24-X	COH28-X
Frequency range	THz	191 to 197		C+L	
Phase difference between In and Qn	deg	90 ± 5			
Excess insertion loss	dB	< 2.5			
IL dual uniformity	dB	< 1.0		< 0.5	
IL uniformity	dB	2.0		1.0	
Optical retrun loss	dB	> 30			
Skew (delay between balanced outputs)	ps	< 1.0			
Max. input optical power	mW	300			
Operating temperature range	°C	0 to 70			
Storage temperature range	°C	-40 to +85			
Package dimensions	mm	52 x 70 x 10		180x32x19.5	
Signal fibre type		COH24 : PANDA PM - 900µm loose tube COH28 : SMF-28 - 900µm loose tube (PM fibre as an option)			
LO fibre type		PANDA PM with 900µm loose tube			
Output fibre type		Coreguide SMF-28 with 900µm loose tube (PM fibers as an option)			

Please, ask for a tunable parameters version (90° phase shift, I/Q, uniformity) at infoweb@kylia.com

ordering information

COH24
COH28

signal connector: FCUPC, FCAPC, SCUPC, SCAPC, LC

LO connector: FCUPC, FCAPC, SCUPC, SCAPC, LC

outputs connectors: FCUPC, FCAPC, SCUPC, SCAPC, LC

ordering information

COH24-X
COH28-X

signal connector: FCUPC, FCAPC, SCUPC, SCAPC, LC

LO connector: FCUPC, FCAPC, SCUPC, SCAPC, LC

outputs connectors: FCUPC, FCAPC, SCUPC, SCAPC, LC